

# Aviation News

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Forecasts Aircraft Contract Terminations: Maj. Gen. Bennett E. Meyers, deputy director of AAF Air Technical Service Command, who sees one-third of all contracts in the aircraft industry terminated with Germany's fall. Gen. Meyers is playing a vital role in renegotiation, contract termination and production cutback program. (Story on Page 16)

# A *Better* RELIEF VALVE For Aircraft Hydraulic Systems



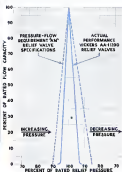
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## THE AVIATION NEWS

### Washington Observer

**X-DAY PLANS**—Officials in Washington are concerned over what may happen to war production on the day that Germany is defeated. The situation is receiving the attention of production as well as military men in the capital. Some aircraft companies are preparing that they release all employees on "X" day, lose out of two days' production and then return to the job that still will remain before Japan is brought to its knees. The Navy is particularly concerned about possible production interruptions which may follow the fall of Germany.

**PACIFIC WAR**—The war in the Pacific will still require tremendous production. Both military and production men recall the damage done to vital machines and equipment in war plants when the 1918 armistice was signed, and they are making plans to avoid a repetition of that when X-Day comes in Europe. Details are now being worked out.

**POST-WAR PLANS**—Two important aircraft manufacturers in different fields have dropped hints of their post-war plans within the week—Douglas Brothers of Douglas Aircraft, and John F. Gory, of Beech Aircraft manufacturers have been reluctant to discuss the future, except in the most general terms. The action of these

two executives in telling the world that they expect to be in business in a big way when peace comes again is being commented in Washington.

**CUTBACK PROCEDURE**—The furor caused by unexpected cutbacks in Army airplane production recently resulted in close attention to future procedure in such cases in official Washington circles against the day when cutbacks come again as they inevitably will. Officials once more may some sort of cushion must be fashioned before any further announcements. The Navy, for example, is said to have decided to announce cutbacks locally rather than raise them up for Washington announcement with the resultant emphasis which a Washington date-line gives to a news story.

**CUTBACK SAVINGS**—Washington government officials say privately that taxpayers in effect having war plants should throw their hats in the air instead of complaining about cutbacks. Each cutback means the saving of hundreds of millions of dollars which would come out of their pockets. This is easier said than done when a country's economy is largely built on war production but in the long-range view of things, it is best. Production officials in Washington



U. S. Navy training storage house to rest in their Moffett Field hangar.





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1/8 to 1/4"	-.002 +.005	-.0015 +.0015	-.004 +.004	-.005 +.005
1/4 to 1"	-.002 +.005	-.002 +.002	-.005 +.005	-.007 +.007
1" to 2"	-.010 +.010	-.0025 +.0025	-.006 +.006	-.008 +.008

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## WPB Shakeup Expected to Result In Abolishing APB, Shuffling ARCO

End of Aircraft Production Board recommended by its members on ground that production job is nearing finish; Tracy to become acting director of diminishing ARCO with departure of T. P. Wright.

By SCOTTY HERSHEY

There are strong indications that WPB's Aircraft Production Board will be abolished, with prospects of a general reshuffling of the functions of the Board and the Aircraft Resources Control Office, stemming partly from a shift of top government personnel dealing directly with the aircraft manufacturing program.

Members of the Aircraft Production Board have recommended that the Board be abolished. They feel that the job the Board was set up to do has largely been accomplished, an indication that the aircraft industry has met the requirements of the armed services.

J. A. Krug, acting chairman of the War Production Board, late last week had not definitely decided to abandon it, but the Board's recommendation for its own abolition was expected to carry considerable weight.

Tracy to Take Over—Meanwhile, Myron A. Tracy, who has been with the government since WPA days, will take over as acting director of the Aircraft Resources Control office with the departure of T. P. Wright, director of the office and member and recorder of the Aircraft Production Board, who has been nominated as administrator of Civil Aeronautics.

Tracy joined the National Defense Advisory Commission in 1940 about the time Wright was called to Washington from his post as vice-president and director of engineering for Curtiss-Wright. Later Tracy transferred to the OPA and when the aircraft production division was set up within WPB, he was chief of the airplane branch. When that branch was dissolved and ARCO was set up in December, 1943, he became chief

of the program coordination division where he has served under Wright.

When Reorganized—Almost connected with Wright's nomination to the CAA, Charles E. Wilson, WPB executive vice-chairman and chairman of the Aircraft Production Board, submitted his resignation from the government together with a blast at workings within the WPB organization.

Third member of the Aircraft Production Board concerned in the personnel shift is Lieut. Gen. William S. Keville, named to head the new Air Technical Service Command, made up of the old Materiel Command and the Air Service Command.

Three Key Men Lost—Thus, the Aircraft Production Board, heretofore an important agency with which the aircraft industry has dealt since the aircraft construction program was started, loses three key men.

With the recommended folding of the Aircraft Production Board, the plan being considered under the Joint Aircraft Committee the directing agency for the aircraft production program with the Aircraft Resources Control Office as its executive agency. ARCO has acted as executive agency for the Aircraft Production Board.

Krug Faces Tough Job—Before the Aircraft Production Board can be abolished, Krug must settle old grievances and orders changing duties and responsibilities. Krug, a former WPB vice-chairman, is 36 years old and recently has been serving in the Navy as a lieutenant commander.

Interesting speculation has arisen as to Krug's relation to the aircraft industry. While he was chief of practices for WPB, he delegated to ARCO and the Aircraft Scheduling Unit, the authority to issue materials priorities without applying to the Board. Under the proposed new set-up these authorities will have to be re-delegated and the aircraft industry is watching



AIRCRAFT GRAVEYARD:

Scrapped fuselages and wings, stripped of the bulk of their useful parts, lie in a salvage yard awaiting shipment to the United States as scrap. At one large salvage yard at a 15th Air Forces Service command advanced depot more than 600 tons of damaged aircraft are handled every month. Over 286 damaged aircraft a month are sent back to combat units whole again with salvaged and new parts.

more than casual interest for the results.

**Wagner's Resignation Loss in Industry**—Wagner's work as chief of aircraft production was generally highly satisfactory to the aircraft industry and his departure from WPB resulted in immediate expressions of regret within the industry. Wagner, twice previously tried to resign and, on at least one occasion, aircraft industry executives exerted sufficient pressure to keep him on the job.

Members of the Joint Aircraft Commission, which will be the directing agency for aircraft production, are: Army—Gen. H. H. Arnold, Maj. Gen. O. P. Belts and Lt. Gen. G. M. Gillen and Brig. Gen. E. M. Powers as alternates; Navy—Rear Admiral Lawrence D. Richardson, Comdr. H. D. Riley, Comdr. T. W. Jones and Rear Admiral E. M. Pace, Jr., alternate; Air Force—Brig. Gen. H. H. Marshall, Jr., William L. Walker and alternates Air Vice Marshal H. B. Macmillan, Air Commodore D. K. Nowell, Capt. E. M. Abel-Smith and S. W. Mansel, T. P. Williams and Dr. A. E. Lombard represented the Aircraft Production Board with M. S. Tracy, its alternate.

## Lovett Cites Need Of Scrapping Planes

Tell headlines surplus planes must be accepted as part of war costs point to need of maintaining up-to-date air force with modern equipment.

One of the first public moves in securing support for an education program to educate the public with the necessity for scrapping of much aircraft surplus was taken last week by the Assistant Secretary of War for Air, Robert A. Lovett.

Outlining planning for the future, Mr. Lovett told a radio broadcast convention that preservation of the aircraft industry in a strong position is a prerequisite of continued air supremacy, that large scale scrapping of surplus aircraft is necessary to accomplish this. These surplus must be accepted realistically for what they are—one of the great costs of modern war.

Retaining leadership means maintenance, with full public support, of a strong permanent air force with skilled personnel and up-to-date equipment. He pointed out that replacement of obsolete aircraft must be a constant process.

## World Aviation

Work is going ahead on the long-awaited report on international aviation under the auspices of the subcommittee of the Senate Commerce Committee. Chairman Clark of Missouri returned to Washington last week and the present plan is that he, with Senators Bailey of North Carolina, chairman of the full committee, and Brewster of Maine will complete the report during the congressional recess expected to run from mid-September through Nov. 7.

If other subcommittee members are not out in Washington during the recess, the report likely will be turned over to them for consideration. If not, it will go to the full committee when Congress reassembles, then to be passed on by the full Senate. The bill, if approved, presented to the Senate as the Commerce committee's report.

and said that the Materials Command now is chafing a comprehensive post-war experimental program.

## NAA Collier Award Committee Meets

The new committee sponsored by the National Aeronautics Association to make the annual Ralph L. Collier Trophy Award, met last week in Washington for the first time to draft rules and regulations for the award.

George Leeming, aircraft consultant, office of the chairman of War Production Board, is chairman, and members are: William H. Enright, president of Rensselaer Aeronautics and of NAA, Chrls. Wiley Wilson, aviation editor of New York Herald Tribune, Roger Wolfe Kahn, German Aircraft Corp., and NAA director, Lawrence P. Shoup, chairman of the board of Aircraft Owners and Pilots Association; William P. MacCroskey, NAA general counsel; Dr. George W. Lewis, director of Aeronautical Research, National Advisory Committee for Aeronautics; William P. Redding, executive commissioner of Denver Chamber of Commerce, treasurer of NAA, and secretary of the Committee; and Lester D. Gardner, chairman of the Council and director of archives, Institute of Aeronautical Sciences.

## U. S. Experts Ready For World Air Talks

With discussions with individual countries virtually completed, the assistant Secretary of State Adolf Berle, Jr., and officials of the Aviation Division are prepared to begin the long-planned international conference on civil aviation as soon as other nations signify their willingness. State Department officials now are considering what may be the best means to arrange the full-dress conference before the end of the year.

Three reasons are important in country with which post-war commercial air arrangements have not been discussed—France—and the need of shaping an international air policy for the state that will be the western leader in post-war aviation. When he does act, he doubtless will do so with a better-than-average appreciation of problems of the country located and the reasonable extent of state rights in controlling air commerce. He has been advised by experts, and recently conferred at length with no less an authority than Oswald Ryan, Civil Aeronautics Board member, who was a West Coast visitor.

**PLANE BUILDERS HOPEFUL**—Major industry executives, who not long ago stressed the small number of transport aircraft required to "saturate" the air market, do so no longer. Their sales of four-engine passenger and cargo transports may not be slumping at the start. And they may be able to recoup the year and a half when their will have been sold in the planes that the market can absorb, with little hope for any heavy orders to replace equipment that isn't going to wear out. But, they'll have by that time a half-century of promises to keep them in thriving business—an adaptation of the automobile industry's "new model" device.

**GREYHOUND BUSES MAY USE PLANE ENGINES**

What is believed to be the first attempt to adapt air-cooled aviation engines to highway transportation is involved in an order for new type buses placed with Consolidated Valtec by Greyhound Corp.

While Consolidated Valtec officials refer all inquiries to Greyhound, it is understood that the first prototype will soon be tested. It will be powered by air-cooled engines and incorporate a number of details of airplane construction heretofore foreign to bus-building.

**U. S. Gets Sea Order**—Commander with the Greyhound announced that an order had been placed with Consolidated was one that as order for new type buses as had been placed with General Motors. Deliveries in both instances are dependent on release of materials from war production. Competition between Consoli-

dated and General Motors in such direct fashion will receive close attention of both automotive and aircraft executives.

## WEST COAST REPORT

### Intrastate Air Policy Studied in California

Program planned by Gov. Warren expected to be western leader in post-war aviation.

By SCHOLAR BANGS

Western factory lands and airline operators may anticipate a nationally action by Gov. Earl Warren, California, toward the end of shaping an intrastate air policy for the state that will be the western leader in post-war aviation. When he does act, he doubtless will do so with a better-than-average appreciation of problems of the country located and the reasonable extent of state rights in controlling air commerce. He has been advised by experts, and recently conferred at length with no less an authority than Oswald Ryan, Civil Aeronautics Board member, who was a West Coast visitor.

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## Unit Renamed

Army Air Force Materiel Command at Wright Field and Air Service Command at Patterson field have been redesignated the Air Technical Service Command since the reorganization along the lines of Gen. William B. Kinnahan as director of both. Brig. Gen. Kenneth L. Wallis succeeds Wright Field and Maj. Gen. Chester MacDonell is commander at Patterson.



## CAA TRAINEES RECEIVE SCHOLARSHIP AWARDS:

Four presidents of the Civil Aeronautics Administration's Inter-American mechanics school are shown above as Bruce Utsumi, CAA's director of inspection and training, presents scholarships for further study in U. S. aircraft manufacturing plants. Left to right are Vladimir Gomez, Colombia, who will study operations and maintenance of aircraft instruments at Sperry Gyroscope Co.; Rene Rander, Brazil, operation and maintenance of aircraft engines at Pratt & Whitney; Uthman; Juan D. Green, CAA coordinator of international training, Juan Pardo, Brazil, Pratt & Whitney, and Juan Torres, Cuba, who will study aircraft manufacturing techniques at Piper Aircraft Corp.

view. By the time their sales of new transports begin to fall off, they will have under construction new planes showing such startling improvement in turning power and performance that competing airlines will be forced to shelve their still-new planes for the newer.

West Coast builders have on hand today inventions that will not appear in the first post-war models. They say flying about. They are being held in reserve for installation on later transports not yet announced. This will induce a rapid rate of obsolescence a factor that more than any other one thing may delay "quiet place" ventures. Manufacturers fear that any "Queen Mary" airlines they might attempt to build will be rendered obsolete before they are flown. They are going to prefer to stick with the building of such as the new, completely new, completely large aircraft, periodically replaced by new models embodying new operating concepts and travel history.

**SECRET**—An Alaska-Congressman, and touring Congressman were landed in Los Angeles to a common example of military "secrecy." The War Department said "No" to the suggestion of members of the congressional group that they be shown a new, specified, and highly restricted warplane. Landing at a major airport following an after-lunch airplane over Los Angeles they couldn't avoid

seeing the plane they weren't supposed to see. It has been at the airport for several months and viewed on the ground and in flight by thousands of garden variety citizens.

**POST SHORTEN**—Western factory executives who recently thought "unrealistic" Consolidated Valtec's admission to workers—"What you do today is determining where you will be tomorrow."—might have been right. In analysis of the situation, they may believe that Consair is not as fully aware as other plants of the power of union contract seniority clauses. It would seem, rather, that Consair's "What you do today..." covered not so much a warning to workers to watch their step as an assurance that the company will recommend to other jobs the "good workers" who are forced to bow to seniority and accept layoffs during the post-war conversion period.

**CONSAIRWAY**—Consair's failure to assume, in time, the post-war place for its California-Australia-ATC airline, Consairway, may be good business. Consairway's Pacific terminus has just been switched from Australia to New Guinea. Apparently the airline will be extended toward the Orient as the Pacific War advances. Every extension will add to the operations know-how of Consairway's personnel; will add to the value of Consairway's only tangible asset—since the airline owns





**Surplus Aircraft Await CAA OK:** At CAA test base for surplus planes at Dayton Army Air Field, Dayton, Ohio, four army planes declared surplus are seen on the hangar apron, awaiting tests for commercial

licensing by CAA. Left to right, Aero Arvin (Canadian built) AT-33; North American O-51R observation plane; Aerocon-built PT-23 trainer (Pittsburgh design); and Douglas C-48 observation.

at the base undergoing type tests are a Boeing Model 247 engine designation C-73) twin-engine transport, which will carry 16 passengers and crew of three, now subject to test because of major Army modifications installing different engines and propellers from those used in the version already commercially licensed; a Martin B-36 Marauder two-engine bomber, an Aero Arvin twin-engine advanced trainer AT-38 Canadian-built, and a Douglas O-46 high-wing observation monoplane.

**Fighter Planes—**McCabe indicates CAA may disapprove general licensing for commercial use of fighter and bomber types, although there is possibility that special licenses for specified uses by experienced pilots might be authorized. Be pointed out that CAA standards emphasize safety beyond performance and are occasionally at variance from military standards which are primarily seeking high performance.

If CAA disapproves a plane type for commercial license, its disposal value drops to a negligible quantity since it may not be flown in this country for other than military use. In such case, surplus planes of a disapproved type probably would be sold by airfield or scrapped, unless they were sold to some friendly foreign government for its military use.

## Can. Vickers Sold

Control of Canadian Vickers is suitably reported to have been purchased by Roy M. Wolin, of Montreal, and associates. Control of 30 percent of the stock was held by the Belgian Solvay trust through Louvain, Ltd., and Wolin has bought out Louvain for an undisclosed amount.

Wolin is interested primarily in shipbuilding and the steel industry and owns a number of shipbuilding plants throughout Ontario.

## FEDERAL DIGEST

### WPB Eases Ruling On Wooden Props

Replacements of blades now permitted without agency OK; summary of week's activities in U. S. and war agencies.

By MARY PAULINE PERRY

Latest amendment to General Limitation Order L-48, exempting wooden aircraft propellers from present restrictions on transfer of aircraft or aircraft products, War Production Board reports.

Officials explain that wooden propellers are used by the large majority of aircraft operators and that replacements are now permitted without WPB approval, thus eliminating procedural delay. Restrictions on manufacture of wooden propellers remain.

**Chromium Tube Plugs**—Former manufacturers of chrome are placed tubular ferrules are making tubular parts for planes, tanks and other types of military equipment, and will be unable to resume large-scale manufacture of

their normal products soon, the industry advisory committee informs WPB. Alloy steels from civilian production of styrene and butadiene, used in production of synthetic rubber, were removed, as they are now in sufficient supply as the result of improved production techniques. Styrene also is used in plastics, magnesium castings and aircraft laminates.

Operating Committee on Aircraft Materials Conservation has ordered that use of all chromium chemicals, chrome and chromium salts utilized in finishing metals be dispensed with where practical, and alternative materials used. These chemicals are critical and requirements probably will increase.

**Production Executive Committee** Staff of WPB, after six weeks of reviewing the placing of production cutbacks, said that such cutbacks are not now a significant problem. Between June 15 and Aug. 1, a total of 216 cutbacks was reviewed. Of these the staff and two employees were to be released in 130 cases and in an additional 35 cases the number of workers to be laid off, if any, was unknown.

National Labor Relations Board has ordered elections at General Motors Corp. (Allison Div.) for timekeepers for or against Indianapolis Lee 3, United Aircraft Engine Workers, Inc., CIO, Production and maintenance employees and mechanical engineers in plants 1 to 7 inclusive, are to vote for UAW-CIO, United Aircraft Engine Workers, Inc., CIO, or for neither.

Trial committee recommended Knauer Motors, Inc., cease and desist from discouraging membership in IAM-AFL; from discharging or otherwise discriminating against any employee because he has given testimony under the act; or from in any other manner interfering with, restraining, or coercing em-

## A MESSAGE TO MOTHERS AND FATHERS OF SERVICEMEN

Returning servicemen and women have a ready-made postwar plan in the "G. I. Bill of Rights" which recently passed Congress. Among its many provisions are such awards to veterans of World War II as tuition for vocational training plus a government guarantee on loans to enter or purchase a business. It is a guarantee of opportunity.

Knowing that after the war aviation will provide opportunities which will even surpass those offered by the automotive and radio industries after the last war, your sons and daughters in the service will be exceedingly interested in studying the career opportunities in aviation. California Flyers' School of Aeronautics has a limited number of pre-Peak Harbor catalogs which factually describe various divisions of aviation, the opportunities, the training, and educational background necessary. Although it is obsolete in minor respect, the book is one that every young person considering a career will want. It's free. There is no obligation.

California Flyers, which is one of the nation's leading aviation schools, will accept no enrollments or deposits at this time. This famous school has completed an intensive training program for the U. S. Army Air Corps and today is actively engaged in a important aviation project. Till the war is won, California Flyers must say, "Sorry, no enrollment is accepted." But in the meanwhile, heard new postwar aviation courses which will meet postwar aviation problems are being created, and they will be well worth waiting for!

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playoffs in their self-or-governational rights; offer three employees immediate reinstatement with back pay, and paid complete notice for 60 days.

**Office of War Information** has released a report on production and manpower in major categories of military equipment in which shortages have been classified as critical. In the report, OWI says aircraft production, which accounts for a large share of the entire warplane program, is set now to begin an apparent critical shortage.

National headquarters of the War Production Commission has dispatched specialists around the country to find 50 specific inventory items due to be shipped to Europe and lead WPC divisions must report inter-divisional needs.

**Production Resources** (Warplane) is expected to be a possible solution procedure for Federal Reserve bank executives of Production Resources (P-R) center by economic basis to prevent where war production is increased. P-R center may see control to deliver into stock of his local bank approximately 10 percent of the second wave of his war assets loans.

Warplane Resources is being banked in production on the basis by Federal Reserve bank executives.

**National War Labor Board** directed a minority majority committee of membership classes and a committee of action data in a dispute case between the Consolidated Aircraft Corp., Detroit, and the UAW.

With the union and the company re-examined the situation of the Southern California Aircraft Industry was paid for most of the pay demands and some in disagreement over rates that should be paid other classifications.

The Board subsequently decided the situation of the SCAI plan, with the provision that the company be recovering rates above those set in the past it to have no pay reduced as a result of the Board's action. Reimbursement of a guarantee machinery, to find out how a contract was revised.

**P-R** is unanimously referred back for further action regarding a plan proposed to increase minimum wage (except war) now submitted by the National Aircraft Corp., of St. Louis, and IBM Corp. The plan would increase the second shift bonus from seven cents to ten cents a week was approved.

The case involving 2324 employees was originally referred to the Board in a dispute. However, after a hearing before the Airline Pilots of the Board, the agreement was reached that some except exceptions for improvement.

**Defense Plant Corp.** has authorized an increase in its contract with Aircraft Engineering Corp., Providence, to provide additional plant facilities in Army, Calif. at a cost of approximately \$100,000, resulting in an overall commitment of about \$175.

American South Corp's contract has been increased by about \$250,000 to provide additional equipment at a plant in Chicago, Mass. The overall commitment is now approximately \$1,000,000.

**Army-Navy "E" Award** has been won by the Auto-Air Corp., One Station East.

**War Department** has authorized additional construction at Marine Field, Calif. in the amount of \$100,000 for construction of hangar, service apron, additional buildings with parking and maintenance areas.

A contract has been awarded for building a building for the Air Force and Navy, including hangar service

## Wright Delay?

Reports from Washington's Capitol Hill are that Secretary of Commerce Jesse Jones, Under Secretary Wayne Chubbuck, Taylor, and Secretary William A. M. Burton will make confirmation of T. P. Wright as new Civil Aeronautics Administrator before mid-September, when Congress is thinking about taking a recess until after the elections.

Senator McCarran of Nevada, however, has urged Chairman Delaney of the Senate Committee on Commerce, to whom the nomination was submitted, asking that Committee action be deferred until McCarran returns to Washington. The request probably will be granted, as a matter of Congressional courtesy.

**Wire Sent McCarran**—Jones, Taylor and Burton are said to have wired McCarran in his home state, where he is fighting a collection battle, asking him to withdraw the request.

McCarran, fathered the Civil Aeronautics Act of 1938, has introduced his own bill to amend it, and is known to be opposed to anything reviving of national Conference Department control over the Civil Aeronautics Administration.

and meeting with Jones and other agents at Pittsburgh Station, Airline, near Pittsburgh, Calif. Amount of contract is \$1,000,000.

Improvements at Marine Field near San Francisco, Calif., have been authorized to the amount of \$200,000. Improvements are to include a new hangar, including existing hangar and construction of new hangar, maintenance apron, parking facility, etc.

In addition, the War Department has set counsel for improvements at Army Air Base and Headquarters which in the country is the approximate amount of \$1,000,000.

## WPB Rules on Plane Lighting Equipment

War Production Board has added types of aircraft lighting equipment in an amendment to the Table of Acceptable Assemblies in a further effort to achieve joint Army-Navy certification of all military items.

The table, which supplements the order as a guide to manufacturers and purchasers, lists the types, specifications and manufacturers of aircraft lighting equipment that has been certified as ac-

ceptable by the Aeronautical Board, Army Air Forces, Navy Department of Aeronautics, or the Civil Aeronautics Administration.

**Items Certified**—Among items now certified as acceptable by both the Army and Navy are certain types of cockpit lighting equipment and indicator light assemblies.

## New Plan Devised to Identify Materials

The National Standards Committee of the Aeronautical Chamber of Commerce has developed a new uniform identification system for materials used in aircraft manufacturing to replace the outmoded color code plan.

The new system, based on suggestions contributed by the Army, Navy, aircraft and steel industries, the latter participating through the American Iron and Steel Institute, consists of a printed legend stating the specification number and condition, the nominal thickness, steel manufacturer's name or trade mark and the commercial designation (optional) to be used for identification marking of steel sheet, bar, rod or wire.

**Conference**—Approval of the system is expected at the special Army-Navy-industry conference which will be held Sept. 19 at the Hotel Lexington in New York City. Army and Navy officials already have endorsed it as a procedure which will simplify their problems of stocking materials in the field. Industry sources believe that because of time-saving and economy measures, some mutually satisfactory version of the system may be put into effect soon.

## L.I. Group Organized

Representatives of more than a dozen manufacturing plants, airlines, educational institutions and airport engineers are forming the Long Island Aeronautical Engineering Conference with the goal of a program of joint research on major problems and possibly an exchange of facilities and personnel.

Chairman is Dr. R. Paul Harrington, of the Brooklyn Polytechnic Institute. Members of the executive committee are: Preston B. Bassett, Sperry Gyroscope; A. A. Kartvel, Republic Aviation; William Lefebvre, American Airlines, and Harrington.



This big black bulletmaker is the first true night fighter



Designers and Builders of the  
**NORTHROP Black WIDOW P-61 NIGHT FIGHTER**  
NORTHROP AIRCRAFT, INC. • NORTHROP FIELD, HAWTHORNE, CALIFORNIA  
MEMBER AIRCRAFT MANUFACTURING COMPANY, INC.



## End of War With Germany to Close Third of Army Plane Contracts

Close co-operation of industry with Army will bring prompt termination action, says Lovett, Knudsen, Meyers at AAF Materiel and Services mass contractors' conference in New York.

One-third of all Army aviation contracts will be terminated when the war with Germany ends, thus creating an avalanche of readjustment problems which will require close co-operation of industry with the government agencies if long delays are to be avoided. This was emphasized forcefully last week when more than 1,500 prime and sub-contractors gathered in New York City to hear Assistant Secretary of War for Air Robert A. Lovett, Lt. Gen. William S. Knudsen, director of the Army Air Forces Materiel and Services, and a number of other Army and civilian readjustment officials discuss the problems that are facing industry in the near future.

The Army has streamlined its process for readjustment of procurement contracts. Maj. Gen. Russell E. Meyers, deputy director, AAF Materiel and Services, pointed out, and will afford the greatest possible speed, but it is essential, he added, that industry be prepared to do its share. This includes, said the Army representatives, the prompt preparation of claims, proper completion of inventory figures, adjustment of contracts and agreements with sub-contractors, and particularly a careful study of readjustment procedure by especially assigned personnel.

**Contracting Officers' Powers Broad.**—The Army has scheduled 4,200 contracting officers in termination work and the existing law has made it possible for these officers to assume broad powers. Claims not exceeding \$10,000 need only the signature of the contracting officer and claims as high as \$500,000 require additionally only a review by an Army board. Of particular interest was the fact stressed by some of the speakers, the decision of the Army in the readjustment is final. There is no higher authority that can countermand the Army's final decision, it was said.

Careful preparation by industry officials for the initial conference held with Army officers on the company's readjustment claim will do much to speed up the entire

process of termination. This preparation, said speakers at last week's conference, requires complete data on surplus stocks and all considerations that go into the evaluation of these stocks. It requires study of reconversion methods and problems and for this purpose the Army urges that qualified personnel be given this task as a full-time responsibility and that they be given broad latitude and power in the dealings with the contracting officer.

**Don't Look for Shorter Way.**—Col. E. S. Pillsbury, assistant chief of the readjustment branch and chief of the termination section, Materiel Command, Army Air Forces, Wright Field, stressed one bit of advice: the termination rules which have been adopted were selected because they will do the job the quickest and best way and industry representatives are urged to "get along on the rules—don't look for panaceas—shorter, quicker methods."

Speakers at the New York session, in addition to Secretary Lovett, General Knudsen, and Col. Pillsbury, included: Col. Don L. Rothman, supervisor, Eastern Pro-

cessment District, who opened the meeting and introduced the chairman, Brig. Gen. Frederick M. Hopkins, Jr., chief of the Resources Division, AAFMS; Col. E. W. Bowlings, chief, readjustment division; C. H. Hummel, Bendix Aviation Corp.; John Hancock, co-sponsor of the Harrah-Hancock Report; and Chariton MacVaugh, deputy director, readjustment division, AAF Headquarters.

### Bendix to Make Home Radio Sets

Announces plan for production of new line as soon as military situation permits.

Bendix Aviation Corp., making its first entry into the consumer manufacturing field, announces it will manufacture home radio sets as soon as the military situation permits.

Kenneth H. Breach, president, said the decision to enter the home radio field was in line with the company's policy to manufacture certain consumer products which will represent real contributions to the public in point of engineering advancement and at prices made possible by low-cost production methods.

**Large Radio Producer.**—Bendix Aviation is one of the largest producers of precision radio, radar and other communications equipment for aircraft and military use. The home radios will be manufactured at the Baltimore plants.

### To Speed Contract Terminations

Here are a few of the specific steps that industry can take to aid the Army in speeding up the tempo of supply contract terminations, as suggested by various speakers at the contractors' conference held by the Army last week in New York:

1. Get months into agreement with physical inventory.

2. Advise commitments for sub-contracted items.

3. Inventory material on hand and stocks in process and determine how much is usable for other purposes and how much must be sold scrap.

4. Minimize surplus material as possible into production now—somewhere.

5. Prime contractors must recognize their responsibility to sub-contractors and train them, where necessary, in the elements of the termination procedure.

6. Set up an independent organization within the company to handle terminations. This personnel should study rules and methods carefully and become well acquainted with termination procedure.

7. Give termination division personnel as much power as possible to avoid further delays caused by certainty and approval by others.

8. In large corporations, allow separate plans and divisions to handle their own terminations independently.

9. Pre-determine as many of the termination pitfalls and problems as possible and have answers ready.

10. Go into your initial conference with the contracting officer well armed with facts and figures—and with the authority to settle negotiations.

# Phillips

first to conduct  
a flight test program  
for determining  
anti-knock performance  
of aviation gasoline  
under  
actual flying conditions

## Phillips AVIATION GASOLINE

A major supplier of 100 octane gasoline to the Army, Navy, and United Nations air forces

## PRIVATE FLYING

### Anyone Can Learn to Fly in 5 Hours Parks' Tests With Ecoupe Show

Average student can pilot plane alone in less time, record of 109 beginners reveals; expense of operating craft put at less than that of light automobile.

Most oft-asked questions regarding post-war private flying concern the length of time it takes to learn to fly, whether it is difficult to learn and the cost.

Parks Air College and its affiliated school set out to find an answer to these and similar questions and the results of their experiments provide a sound, business-like approach to the basic factors of future private flying.

► **Best, Michèle Soule**—Primarily, Parks was trying to determine the best methods of instruction and the time required to solo a two-control airplane—specifically, the Ecoupe, made by Engineering and Research Corp. They found the answer and other significant data during the experiment which covered nine months. It was essential at five points and the results are of importance to future private flyers and instructors as well.

Results of the experiment, according to Parks, prove that anybody can fly this new type private airplane with an average of five hours' instruction. One hundred nine persons between the ages of 16 and 69 took part. The students were not selected, but taken in accordance with their security in various job classifications in Parks' five schools and included latchkey help, guards, stenographers, field personnel, technicians, etc., both men and women.

► **Solo Time Recorded**—A tabulation made according to age groups showed that it required an average of four hours and 54 minutes to solo women students and an average of four hours and 30 minutes to solo men students.

The following is the amount of time required before solo for the various age groups:

20 to 25 years—4 hrs. and 18 mins.
25 to 30 years—4 hrs. and 44 mins.
30 to 35 years—4 hrs. and 50 mins.
35 to 40 years—4 hrs. and 54 mins.
40 to 45 years—5 hrs. and 19 mins.
45 to 50 years—5 hrs. and 3 mins.
50 to 60 years—4 hrs. and 30 mins.

Costs were kept on direct operating expenses of the Ecoupe during the experimental program, including student instruction, demonstration and cross-country flying.

Total hours flown since 1,125. Gasoline used amounted to 4,918 gallons at 25 cents a gallon and 214 quarts of oil at 39 cents a quart. Material used for maintenance amounted to \$203.41 and labor required amounted to \$1,117 or 558.30 hours at \$3 an hour.

► **Expenses**—The cost per hour totaled \$2156 on a basis of \$4 cents per minute, or \$500; material \$3.33 and labor \$41, with the cost per mile set at \$40.

Cruising speed of the airplane is 100 mph and Parks, taking three popular-priced cars as a basis, came to the conclusion that the di-

rect cost is less than that on the Ford, Chevrolet or Plymouth.

The experiment was conducted at Masonry Institute of Aeronautics, Riverdale, Mo.; Mississippi Institute of Aeronautics, Jackson, Miss.; Alabama Institute of Aeronautics, Tuscaloosa, Ala.; Cape Institute of Aeronautics of Cape Girardeau, Mo.; and Parks Air College, East St. Louis, Ill.

Since the experiments covered men and women in all age groups and in different sections of the country and the students could be considered average private flying prospects, the Parks study assumes a significance beyond the original purpose of the program.

### Expect CAA Control Of 73, 80 Octane Gas

Power of distribution to private aircraft probably will be taken over from OPA on Nov. 1.

Control of the distribution of 73 and 80 octane gasoline for private aircraft is expected to be transferred shortly from the Office of Price Administration to the Civil Aeronautics Administration with Nov. 1 tentatively set as the date for the switch.

Extended discussions between WPA officials of the War Production Board and aviation industry



### CAA ENGINEERS CHECK SURPLUS PLANES:

Among the Army surplus airplanes now being type-tested by CAA flight engineers at CAA test base, Dayton Army Air Field, Vandalia, Ohio, is the Topoloverg L-2-M, two-place liaison craft, of special interest to prospective private plane buyers. Radio equipment seen behind CAA Flight Engineer John P. Jones, was used for communications between plane and ground artillery batteries to direct fire. Some of these planes also were used by War Training Service.

## Dependable all around duty assured with Simmonds Push-Pull Controls



### FIRST TO CARRY THE YELLOW DOT

of Army Air Force Winterization acceptance for operation in extreme temperatures is the Simmonds-Casady Push-Pull Control. Comprehensive tests with temperatures as low as minus 72°F. and as high as 168°F. prove efficient operation under wide variety of conditions.



**SLIM STRENGTH:** In the best Simmonds push-pull control assembly, withstands tensile and compressive loads of 400 lbs. Credit amplification of design, improved fittings.



**INDEPENDENT:** Cycled 20,000 times under stress, at 100,000 lbs., Simmonds controls are not affected in any way, and can be applied to control the life of an aircraft.



**EFFICIENT:** Input/output ratio of control is measured at various temperatures in locked condition. Exceeds average efficiency as tests the AAF requirements.



**PRECISION CONTROL:** Action between tensile and compressive is negligible. Before and after test average—.004", when—.002". Simmonds sets precision lock control.



**REFORMATION:** AAF specifications call for loads ranging from 10 to 30 lbs. Simmonds average deflection is .140". Simmonds meets average only .002".



**CORROSION:** Simmonds controls meet AAF specifications for corrosion resistance with standard rubber gasket or stainless steel flange. Like ends are rubber gasket.

**INCREASE** screening War Controls on Post-War problems involving push-pull control equipment are limited. Our service engineers will furnish you study with details and specifications. Telephone or write to our nearest Simmonds office.

**SIMMONDS EQUIPMENT FILLS WITH YEAR TYPE OF ALLIED AIRCRAFT**

Simmonds Inc. Controls — Push-Pull Controls — Push-Rope Systems — Aeronautics — Hydraulic — Pneumatic — Simmonds 30-40-50-60-70-80-90-100-110-120-130-140-150-160-170-180-190-200-210-220-230-240-250-260-270-280-290-300-310-320-330-340-350-360-370-380-390-400-410-420-430-440-450-460-470-480-490-500-510-520-530-540-550-560-570-580-590-600-610-620-630-640-650-660-670-680-690-700-710-720-730-740-750-760-770-780-790-800-810-820-830-840-850-860-870-880-890-900-910-920-930-940-950-960-970-980-990-1000-1010-1020-1030-1040-1050-1060-1070-1080-1090-1100-1110-1120-1130-1140-1150-1160-1170-1180-1190-1200-1210-1220-1230-1240-1250-1260-1270-1280-1290-1300-1310-1320-1330-1340-1350-1360-1370-1380-1390-1400-1410-1420-1430-1440-1450-1460-1470-1480-1490-1500-1510-1520-1530-1540-1550-1560-1570-1580-1590-1600-1610-1620-1630-1640-1650-1660-1670-1680-1690-1700-1710-1720-1730-1740-1750-1760-1770-1780-1790-1800-1810-1820-1830-1840-1850-1860-1870-1880-1890-1900-1910-1920-1930-1940-1950-1960-1970-1980-1990-2000-2010-2020-2030-2040-2050-2060-2070-2080-2090-2100-2110-2120-2130-2140-2150-2160-2170-2180-2190-2200-2210-2220-2230-2240-2250-2260-2270-2280-2290-2300-2310-2320-2330-2340-2350-2360-2370-2380-2390-2400-2410-2420-2430-2440-2450-2460-2470-2480-2490-2500-2510-2520-2530-2540-2550-2560-2570-2580-2590-2600-2610-2620-2630-2640-2650-2660-2670-2680-2690-2700-2710-2720-2730-2740-2750-2760-2770-2780-2790-2800-2810-2820-2830-2840-2850-2860-2870-2880-2890-2900-2910-2920-2930-2940-2950-2960-2970-2980-2990-3000-3010-3020-3030-3040-3050-3060-3070-3080-3090-3100-3110-3120-3130-3140-3150-3160-3170-3180-3190-3200-3210-3220-3230-3240-3250-3260-3270-3280-3290-3300-3310-3320-3330-3340-3350-3360-3370-3380-3390-3400-3410-3420-3430-3440-3450-3460-3470-3480-3490-3500-3510-3520-3530-3540-3550-3560-3570-3580-3590-3600-3610-3620-3630-3640-3650-3660-3670-3680-3690-3700-3710-3720-3730-3740-3750-3760-3770-3780-3790-3800-3810-3820-3830-3840-3850-3860-3870-3880-3890-3900-3910-3920-3930-3940-3950-3960-3970-3980-3990-4000-4010-4020-4030-4040-4050-4060-4070-4080-4090-4100-4110-4120-4130-4140-4150-4160-4170-4180-4190-4200-4210-4220-4230-4240-4250-4260-4270-4280-4290-4300-4310-4320-4330-4340-4350-4360-4370-4380-4390-4400-4410-4420-4430-4440-4450-4460-4470-4480-4490-4500-4510-4520-4530-4540-4550-4560-4570-4580-4590-4600-4610-4620-4630-4640-4650-4660-4670-4680-4690-4700-4710-4720-4730-4740-4750-4760-4770-4780-4790-4800-4810-4820-4830-4840-4850-4860-4870-4880-4890-4900-4910-4920-4930-4940-4950-4960-4970-4980-4990-5000-5010-5020-5030-5040-5050-5060-5070-5080-5090-5100-5110-5120-5130-5140-5150-5160-5170-5180-5190-5200-5210-5220-5230-5240-5250-5260-5270-5280-5290-5300-5310-5320-5330-5340-5350-5360-5370-5380-5390-5400-5410-5420-5430-5440-5450-5460-5470-5480-5490-5500-5510-5520-5530-5540-5550-5560-5570-5580-5590-5600-5610-5620-5630-5640-5650-5660-5670-5680-5690-5700-5710-5720-5730-5740-5750-5760-5770-5780-5790-5800-5810-5820-5830-5840-5850-5860-5870-5880-5890-5900-5910-5920-5930-5940-5950-5960-5970-5980-5990-6000-6010-6020-6030-6040-6050-6060-6070-6080-6090-6100-6110-6120-6130-6140-6150-6160-6170-6180-6190-6200-6210-6220-6230-6240-6250-6260-6270-6280-6290-6300-6310-6320-6330-6340-6350-6360-6370-6380-6390-6400-6410-6420-6430-6440-6450-6460-6470-6480-6490-6500-6510-6520-6530-6540-6550-6560-6570-6580-6590-6600-6610-6620-6630-6640-6650-6660-6670-6680-6690-6700-6710-6720-6730-6740-6750-6760-6770-6780-6790-6800-6810-6820-6830-6840-6850-6860-6870-6880-6890-6900-6910-6920-6930-6940-6950-6960-6970-6980-6990-7000-7010-7020-7030-7040-7050-7060-7070-7080-7090-7100-7110-7120-7130-7140-7150-7160-7170-7180-7190-7200-7210-7220-7230-7240-7250-7260-7270-7280-7290-7300-7310-7320-7330-7340-7350-7360-7370-7380-7390-7400-7410-7420-7430-7440-7450-7460-7470-7480-7490-7500-7510-7520-7530-7540-7550-7560-7570-7580-7590-7600-7610-7620-7630-7640-7650-7660-7670-7680-7690-7700-7710-7720-7730-7740-7750-7760-7770-7780-7790-7800-7810-7820-7830-7840-7850-7860-7870-7880-7890-7900-7910-7920-7930-7940-7950-7960-7970-7980-7990-8000-8010-8020-8030-8040-8050-8060-8070-8080-8090-8100-8110-8120-8130-8140-8150-8160-8170-8180-8190-8200-8210-8220-8230-8240-8250-8260-8270-8280-8290-8300-8310-8320-8330-8340-8350-8360-8370-8380-8390-8400-8410-8420-8430-8440-8450-8460-8470-8480-8490-8500-8510-8520-8530-8540-8550-8560-8570-8580-8590-8600-8610-8620-8630-8640-8650-8660-8670-8680-8690-8700-8710-8720-8730-8740-8750-8760-8770-8780-8790-8800-8810-8820-8830-8840-8850-8860-8870-8880-8890-8900-8910-8920-8930-8940-8950-8960-8970-8980-8990-9000-9010-9020-9030-9040-9050-9060-9070-9080-9090-9100-9110-9120-9130-9140-9150-9160-9170-9180-9190-9200-9210-9220-9230-9240-9250-9260-9270-9280-9290-9300-9310-9320-9330-9340-9350-9360-9370-9380-9390-9400-9410-9420-9430-9440-9450-9460-9470-9480-9490-9500-9510-9520-9530-9540-9550-9560-9570-9580-9590-9600-9610-9620-9630-9640-9650-9660-9670-9680-9690-9700-9710-9720-9730-9740-9750-9760-9770-9780-9790-9800-9810-9820-9830-9840-9850-9860-9870-9880-9890-9900-9910-9920-9930-9940-9950-9960-9970-9980-9990-10000-10010-10020-10030-10040-10050-10060-10070-10080-10090-10100-10110-10120-10130-10140-10150-10160-10170-10180-10190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representatives is reported to have led WPB to agree that the best interests of both civil aviation and gasoline conservation would be served by asking CAA to take over the job. It was indicated that CAA would follow in general the plan successfully employed by the Petroleum Administration for War on higher ceiling aviation gasoline.

**Procedure**—Under plans now under consideration, allocations will be made to airports and distributed by the operators in accordance with standards established by CAA, but pilots will share in the responsibility of conserving aviation fuel. The CAA wants to state conservative quantities sufficient to permit civilian airports to remain in operation for use as necessary by military aircraft; civilian flyers to maintain their skill; additional pilots to receive flight training and essential aerial transportation to continue. Supervision would be by inspection of the CAA Safety Regulation Service, whose normal duties require them to visit all airports regularly.

William A. M. Burden, assistant Secretary of Commerce, said the CAA is aware of the necessity for more careful distribution of gasoline for private airplanes and will attempt to get the maximum use of civil aviation facilities with the minimum consumption of aviation gasoline.

**Program**—Detailed operating procedures will be announced shortly by the CAA in working out in cooperation with the Petroleum Administration for War.

Chief reason that CAA wants to ration aviation gasoline, it was understood, is that considerable civilian gasoline is reaching automobile owners and consequently is not being used to further aviation.

**Focuses Air Commerce**—Burden commented that since the CAA is heavily engaged in work for the armed forces and is helping to maintain domestic and international air carrier operations, it is not anxious to assume additional responsibilities, but feels it has an obligation under the Civil Aeronautics Act of 1938 to foster the development of air commerce.

One of the immediate problems in connection with the WPB directive transferred this authority from the Office of Price Administration to what will be done between now and Nov. 1, particularly in regard to those persons already holding aviation gasoline coupons sufficient for fuel to carry them past May 1.

## Beech Expects Post-War Products To Keep All Workers on Payroll

New line of peace-time manufactured goods to be introduced with tapering off of military needs, says Vice-President Gaty; cites substantial backlog for twin-engine cargo planes.

Beech Aircraft's conversion plans contemplate the development of a line of peace-time products "as superior to those offered by its competitors" that there will be jobs for at least as many persons as are now employed by the company.

In a frank statement on the company's post-war prospects, John P. Gaty, vice-president and general manager, foresees an extensive program for Beech, although he did not disclose the activities Beech intends to produce, he did say the company has a large backlog of orders, especially for twin-engine UC-48 cargo airplanes.

**Markets**—He said that in order to develop markets is the utmost during peace, the efficiency of wartime production, which he lauded, must be improved still further so that Beech can pay good wages and salaries and yet sell its products at prices people can afford to pay.

Two immediate situations which the company may have to face were outlined by Gaty in an open letter to employees but which has additional implications in that it indicates the trend of planning in aircraft plants in the Beech class.

**Conversion**—One prospect he cited is the gradual tapering off of production of war material with simultaneous conversion to peace-time manufacturing such as will develop with a continuation of the war against the Japanese after the defeat of Germany. Virtually all Beech production is now centered with the A-36, a plane whose primary field of operations is the Pacific.

The second possibility for which he is prepared is an unexpected end to hostilities and immediate termination of war contracts. In that event many Beech workers would have to find other jobs until conversion has been completed.

**Overtime for Some**—Even so, as Beech sees it, it would be necessary for a number of departments to go immediately on an overtime basis to handle the obligations of the company under termination proceedings. Gaty listed such projects as inventories of raw ma-

terials and parts in process, additional work in the accounting department, full-scale operations in the engineering department, particularly to complete designs now in process for post-war Beechcrafts of new types and subsequent expansion of the experimental department.

The tooling department would participate in the new activity and the outside production department would be called on to secure the aid of subcontractors for component parts and new tooling. Scheduling and planning departments would continue and plant engineering and maintenance would have its hands full during the conversion period.

**Backlog**—The pattern drawn at Beech will find a counterpart at many other plants, subject to local and company conditions, of course, but Beech is trying to make it clear to its workmen the details of the job that lies ahead.

Gaty said that, by pre-war standards, Beech's present backlog of post-war deliveries is immense and new orders should continue to come in when customers know that the company reaches a position to make delivery. He added that it was surprising that the company had any backlog for post-war deliveries at all under present circumstances.

**Post-War Orders**—Deposits have been made with Beech in purchase of post-war aircraft which are to be delivered at some indefinite date and at some indefinite price.

Gaty disclosed that an extensive dealer organization is now being constructed to merchandise the company's post-war products, and he noted that none of the company's present orders were from dealers.

### Conair Names Mara

William A. Mara, partner of the late Eddie Stinson in the formation of Stinson Aircraft Co., and sales director since 1926, has been appointed general sales director of Conaircraft, Tulsa, Okla. Craft Corp., with headquarters at the Conaircraft Division in Wayne, Mich.

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Marquette

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AIR COMPRESSORS • PRECISION PISTONS AND VALVES

## COMMENTARY

## Airborne Army Ready to Pave Way For Allied Smash into Germany

New consolidated forces well prepared if Germans attempt to make a stand behind much publicized but probably overrated Siegfried Line.

The German Armies in the west have been on the run since the middle of August, and Allied strategy is to keep them on the run and not permit a battle of position. However, the Germans have some natural defense lines and the much publicized but probably overrated Siegfried Line and Westwall which may not be easily outflanked if (and it appears to be a big "if") the enemy is able to dig in solidly behind any of these lines, the Allied have a new weapon, highly mobile and of great striking power, which can deal effectively with such a situation.

**■ Airborne Army**—This is Lucius D. Lewis H. Breckerton's flying army, formed by merging all airborne forces now in the U.S. into one unit, approximating an army in size and importance. The leader of the new Allied Airborne Army is a command level with the commanders of the air forces and ground forces, being directly responsible to General Eisenhower and his deputy, Air Chief Marshal Tedder, and thus participating in theater planning in the highest echelon.

This new army with wings takes its orders from Breckerton, not from the ground commanders Bradley or Montgomery, nor from the Allied air chief, Leigh-Mallory. It is also complete with all necessary components—transport planes, gliders, supply and service forces, engineer units, airborne infantry, paratroopers, communication equipment and personnel, guns and light tanks. In one strike behind the strongest and most vital defenses, and hang on to what it hits.

**■ Troop Carrier Developments**—The concept of this highly complex organization did not spring forth full-blown to meet the present situation. Far from it, it is a result of the combined Allied, and to some extent enemy, experience

in the present war. Under the term Troop Carrier Aviation, an transport has become a vital arm of combat operations. The AAF First Troop Carrier Command was established in April, 1942, about eleven months after the Germans conquered the island of Crete by airborne invasion and two years after the Luftwaffe outflanked the British Navy in the battle of Norway.

Motto of the First TCC is *Viaut per gratiam perit* ("The conquest who gets there first"). Its formation was announced in July, 1942, by a special statement of General Arnold, who said that tactical training was under way for combat troops using transport planes and large gliders, and that in size, equipment and fire-power the airborne army will exceed anything of the kind the world has ever seen. And now, two years later, we have it. A brief review of the outstanding examples of the use of troop carrier aviation will indicate the steps in the growth of this busy unit of World War II. Note the development of its three main functions as (1) a tactical agency; (2) a logistical agency; and (3) an evacuation agency.

**■ New Guinea**—In September, 1942, when the Japs were within 14 miles of Port Moresby's outer airfield, General Kenney had 8,998 troops down in force in Australia and saved the day. Shortly afterward, a full division was flown across the high Owen Stanley Range, and landed fresh and in full force at Wangima and other airstrips close to the battle lines in the Buna-Gona area. However, it's not the first cost but the upkeep which matters! These troops were not only transported but were supplied by air at a rate of more than two million pounds per month. Construction equipment, steel mats and asphalt

moved by the same route. Sick and wounded were evacuated on the return trips. The entire operation proved to be of far-reaching tactical significance.

A few months later, in the offensive on Luzon, airborne engineers were flown in to the area and built three fighter strips. These provided fighter cover for the great paratroop landing at Malabon in the Marikina Valley behind the Jap lines at Luzon. About 1,500 troops dropped in 70 seconds. Ten days later, this great enemy stronghold was captured. From here the chief of the "Wehrmacht" air base and the leap-frog operations to Aitape, Hollandia and Samarang were made. Thus was tested and perfected a new form of campaign which, according to General MacArthur, points the way to the ultimate defeat of the enemy in the Pacific.

**■ Mediterranean**—In November, 1943, in connection with our landings at Oran, the Troop Carrier Command flew a parachute battalion in 40 Douglas C-47's over 1,400 miles non-stop from England. This was operation TOUGH, and its purpose was to capture two airfields outside Oran and hold them until relieved by seaborne forces. A few days later more paratroops were dropped on the airfield at Bone, and a week later a parachute battalion was dropped on airfields along the western border of Tunisia. All these fields were held throughout the North African campaign, and by this means the range of our fighters and bombers was extended many miles into enemy territory.

When the rainy season developed, it became impossible to supply the units in these fields with food, medicine and ammunition by motor conveyance. Troop Carrier came to the rescue and for three weeks flew in the necessary supplies to continue operations.

**■ Gliders Used**—Airborne forces available for the invasion of Sicily in July, 1943, consisted of one American and one British airborne division, totaling well over 30,000. This was the first Allied operation in which gliders were extensively used. One group of air landing troops supported Patton's 7th Army in the west and the other group Montgomery's 8th Army on the east coast. As soon as the airfields were established in Sicily, Troop Carrier moved in AAF ground personnel to support the advance air columns. Altogether some 18,000 men were flown in by transport plane and glider in eight



## "Night-letter" cargo for bonus payloads

Wright's new rail trailer can meet easily the loading or unloading needs of the heavy capacity of an airplane—demands full loads for combat or training.

A recent banking of air transport delivered shipments at "Night Letter" rates offers one possible means of achieving capacity loads. Shipments could be handled for maximum efficiency in 40 in. on non-supermarket trucking within a few hours. Such a service would ensure prompt morning delivery outside markets in America.

The reduction of air cargo rates will necessarily be a gradual, continuing process. The "Night Letter"

plan would be to increase a "free market" rate on cargo available on off-peak flights and would run on a self-sustaining basis.

Wright believes that the full load is the key to the gradual reduction of all air traffic rates. To that end, Wright Cyclones offer a possible basis of one or more passengers in the weight of each engine. With lower fuel consumption and maintenance costs, world-wide operations demonstrate the fact that Wright Cyclones pay for themselves.

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### Cyclones Save 3 Ways

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REDUCED MAINTENANCE

# WRIGHT

Aircraft Engines

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**SAYS GEORGE R. CUSHING  
OPERATIONS MANAGER  
DELTA AIR LINES**



"The value of a pound of pay load during the life of an airliner has been variously estimated. The exact value will, of course, vary with the degree of utilization of the equipment.

"Certainly, during this period of capacity loads, every pound which can be saved has a high monetary value, and *still at times be priceless.*

"A few pounds saved may mean that another soldier gets home for his last leave, that another war-essential shipment of express gets through on time, or that another sack of mail can go aboard. In Delta we prefer not to express such things in dollars and cents."

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Write for information

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### BOOTS NUTS SAVE UP TO 40 LBS. PER PLANE

- Being all metal, they are **TOUGHER** and **FASTER** as well as **LIGHTER**.
- Can be used over and over again.
- "Outlast the plane."
- Now used on every type of military aircraft.
- Will be standard on commercial planes after Victory.
- Approved by all government aviation agencies.



**BOOTS NUT-TYPE  
NEW NUT  
(Type B-22)**

The complete Boots nut is a 10-40 heavier than the standard self-locking nut.

days, the total weight exceeding 7,000,000 pounds. During the six weeks' campaign, some 14,000 wounded were evacuated by air.

At a very critical point in the battle of Salerno, on Sept. 13-14, over 1,500 completely equipped paratroopers were flown into the area from Sicily, an operation which turned the tide and eventually saved the day. By this time, airborne aviation had become generally recognized as an important element of air power.

**Operations in Burma**—Since early 1944, when Brig. Gen. Old's Troop Carrier Command began operations on the Burma front, a new principle of warfare has been established. Millions of pounds of supplies have been dropped to combat troops with such precision they have been called "Blunt Bombers," the dropping points being often within rifle shot of the enemy. Infantry and artillery units have been carried many miles behind the Japanese lines. Hundreds of sick and wounded, who would have had no other way to be taken out, have been evacuated from behind these lines. As a member of General Old's staff put it, "Troop Carrier Command's operations were. But it has proved conclusively that with air superiority there is no such thing as *incubation*."

During the winter of 1942-43 in the case of certain units completely cut off and encircled by the Germans the Germans offered a partial proof of the same principle, but in losing air superiority they eventually lost everything. In Burma, British and Indian troops were repeatedly cut off by the Japs but Troop Carrier kept turning apparent defeats into victories.

The next phase was the airborne invasion of Burma by the Air Commandos, led by Col. Phil Cochran and Col. Johnny Allison. The story is too well known to be repeated at length. These successful operations had been made an important factor in General Stilwell's campaign in Burma.

**ITCC and the Invasion**—June 6, 1944, brought the biggest test of all. On this night at 10 o'clock when the first C-47 was airborne the tactical beginning of the liberation of Europe was on. There were six drop zones and there were six Paratrooper planes with specially trained crews to hold the line. The crews of these planes established Roadway navigational aids on the drop zones and also showed marker lights for the guidance of pilots of the main column. A total



### DEWEY IN FARMER HE SOLOED IN 33 YEARS AGO:

Richard H. Dewey, Jr., special projects manager for Fairchild Aircraft Division, soloed in this Fairchild F-24 biplane 33 years ago. He observed his anniversary with a flight in a Fairchild F-24 this month. He has flown 150 types of planes since.

of 924 transports, including 103 which towed gliders, flew in two American airborne infantry divisions with but two and a half percent in aircraft loss.

The British carried out an airborne operation involving one airborne division. Both operations were under the direction of the Allied Expeditionary Air Force Headquarters. These are the units making up the nucleus of General Breton's flying army. Where will they land next? **NAVIGATOR**

### Super Gas Developed For Super Bombers

Although facilities cannot now be diverted to its production, the United States is getting ready to produce a "scooped up" gasoline obtained by refinement of the 100-octane product, it was disclosed last week.

When the demand for the present aviation gasoline in the European theater lessens, production facilities can be diverted to the new fuel. It is expected to give the superbomber greater range and generally better performance for the long raids required in the Pacific theater.

**Quantity Factor**—The Petroleum War Industry Council and about

80 percent of the nation's high octane gasoline capacity can be switched over to the new product when the time comes with only minor changes in facilities. The change, however, cannot be made until the higher octane rating is more important than quantity, the big factor today with the European theater demanding 300,000 barrels daily.

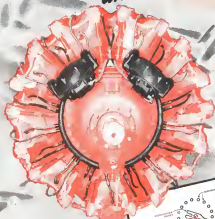
William B. Boyd, Jr., chairman of the industry council, said the new fuel is "100-octane rebuilt chemically," but no further details of the chemical process were revealed.

### Boeing Canadian Plants Make B-29's

Disclosure that a major assembly for the B-29 Superfortress is now being made at the four Vancouver plants of Boeing Aircraft of Canada, Ltd., has been made by Jay Morrison, general manager, adding further to emphasis being placed on Superfortress production.

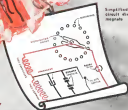
Morrison said the B-29 work would in no way interfere with the present contract for Canadian patrol bombers, of which Boeing Aircraft of Canada is the current chief source of supply.

...TOOK AWAY ONE  
and DOUBLED



Operating at one-half crank-shaft speed, and having no gears other than the drive gear, the magneto-distributor unit of the G-E system is long-lived. Electrodes are made of moisture-proof ceramic. The platinas used have high tracking resistance.

Buy all the BONDS you can—and keep all you buy



Simplified circuit diagram of magneto

## the MARGIN of SAFETY

New G-E high-tension ignition system reduces number of units from three to two—gives the added protection of two magnetos—and doesn't require supercharging

● Skilled pilots who've named barometer planes back across the Channel warmly praise the combat "staying power" of American aircraft. One thing now contributing to this stamina is the G-E high-tension ignition system, in which the functions of magneto and distributor have been crisscrossed into a single, integral unit.

Two of these units replace the three—one magneto and two distributors—found in most conventional systems. Since each magneto is capable of keeping all cylinders firing, both may be put out of action before the engine quits.

### SIMPLIFIED MAINTENANCE

From the ground crew's standpoint, this reduction in the number of units to be serviced is also important. So is the fact that either of the two self-con-

tained, interchangeable magneto-distributors can be detached without removing other parts of the system.

### FLIES HIGH WITHOUT SUPERCHARGING

Ample clearances in the magnetos and solid, though flexible, impregnation of the harness eliminate the need for supercharging at high altitudes. And—the simplified design of the entire system facilitates effective radio-noise shielding.

This high-tension ignition system is one of several G-E systems which give aircraft manufacturers substantial savings in engineering man-hours and assembly time. We'll gladly consult with you on the possibilities of adapting one of these pre-engineered systems—or of designing something entirely new—to fit the projects you are planning. Just call the G-E office near you. General Electric Co., Schenectady 3, N. Y.



Chief magnetos of the magneto-distributors are readily made in the engine. The entire system is designed for ease of installation, timing, maintenance, and repair. It is shown here installed on the Pratt & Whitney aircraft engine of Republic's Thunderbolt (P-47).



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AND  
ENGINEERED SYSTEMS  
FOR AIRCRAFT

GENERAL  ELECTRIC

## PERSONNEL

John B. Thurston has joined the executive staff of Transcontinental & Western Air, Inc., as head of the new industrial engineering division. Previously he was a member of the staff of the Army Corps of Engineers, and an attorney and writer.



Thurston has written for technical publications and frequently has spoken before internal audiences, engineering and other groups. He was instrumental in founding the Institute of Internal Auditors and was its first president.

A. L. Wykes, head of Taylorcraft Aeroplanes (England) Ltd., was killed last month while doing military maneuvers in an Aviator observation plane manufactured for the RAF by his company. Wykes, 45, was an RAF pilot in the last war and well known in aviation circles both in Great Britain and in this country.

Robert H. Averill, assistant to vice-president Hubert J. Wilson of Pennsylvania-Central Airlines, has been appointed chairman of the State Relations Committee of the Transportation Association. Averill is a lawyer and has been with PCA for four years.

David Lewis Miller has been appointed assistant to Harry Stagner, vice-president of traffic for All American Airlines. He joined the company two years ago in an instructor in the Airline War Training School operated by All American and later became a meteorologist and sense data analyst.

William F. McGrath has been named traffic manager of the transportation department of Transcontinental & Western Air, Inc., as a new organization plan involving the creation of the transportation department which will bring all operating and service functions of the airline. He has been the airline company's traffic department manager. McGrath will act as assistant to John Callahan, named as vice-president in charge of transportation.



Tom Rankin, well known acrobatic pilot and head of Rankin Aerobatics and Amusement, Inc., Calif., has received word that his son, **Lieut. Dale Rankin**, has been killed in action over France. Lieut. Rankin had previously been reported missing from a P-51 dive bombing raid on a target along the Meuse River, but hope was held that he might have been a prisoner of war. His decorations included the Air Medal and Oak Leaf Cluster.

W. W. Fisher recently joined General Motors Corp. as vice-president and general manager. He has a background of many years with Wright Aeronautical Corp.

Roger C. Fleming has succeeded Frank Wilson as director of public relations for the Allison Division of General Motors Corp., located at Indianapolis. Wilson's resignation was announced in Aviation News recently.

C. G. Thompson (photo) was awarded a pin at commemoration of his fifteen years with United Air Lines by the company president, W. A. Patterson. Thompson is vice-president of United in charge of public relations and has served the airline in a number of capacities. He has been vice-president since 1949. His previously was associated with United Airways of California and Boeing Air Transport.

New administrative appointments at the Canadian Car and Foundry Co., Ltd., Montreal, are: **William Hurley** as executive vice-president in charge of domestic and export sales, including aircraft; **Lyle McKay**, vice-president and general manager; **Gordon G. Elliot**, general sales representative for domestic sales contracts; and **John F. Forman**, supervisor of Assembly Works, Aircraft Division.

**Leonard S. Balbo** has been elected vice-president for engineering of United Aircraft Corp., and was also appointed a member of the operating and policy committee. He joined United in 1931 and became a director in 1942. At the same time, **Wright A. Perkins** was appointed engineering manager of United's Pratt & Whitney division. Perkins joined the engineering staff in 1932.

H. Almsley Highman, New England executive of United Air Lines, has been named administrative supervisor on the Atlantic seaboard, including New England, New York and Philadelphia. When he joined United in 1938, Highman had 20 years of executive experience in various international shipping and transportation organizations. Highman is a director of Boston Chamber of Commerce, executive secretary of the Boston Aeronautical Association, and chairman of the foreign export commission of the state of Connecticut.

**Conrad Frank W. Wood**, well known aviation writer, has been awarded the Legion of Merit for his work as a member of the staff of Commander, Air Force, Pacific Fleet, when he assisted in supervising much of the planning for the Navy's acquisition of war in the Pacific. Commander Wood returned to active duty on the outbreak of war and has served aboard an Essex class carrier with the Pacific Fleet.

**Fredrick H. B. Frode**, counsel for the Navy Procurement Board, has been appointed general counsel for the War Contracts Price Adjustment Board to succeed W. James Mischel, who has resigned in return to his law practice. Mischel was also counsel for the War Department Price Adjustment Board and has been aided by the War Department counsel, Col. C. M. Williams, Washington, Watts.

**Henry G. Taylor** has been appointed chief engineer of the aircraft carburetor engineering department of Hamilton Products division of Bendix Aviation Corp. He has been a test engineer at the Philadelphia Aeronautical Research Laboratory, Naval Aircraft Factory. He was actively interested in engineering and development of the "Hud-Bronck" "Injection Carburetor" and as many other technical research.

**H. M. McKay** has been named acting general manager of Fairchild Aircraft Division, Fairchild Engine and Airplane Co. McKay went to the Burlington plant in January from the Thompsons, Mo. plant where he was general assistant to vice-president R. B. Beattie. At Washington he has been in charge of the production end of management.

**W. A. Patterson** has been elected president of United Air Lines by the company board of directors. He has been with the company since 1931 and was previously vice-president of the company.

**W. A. Patterson** has been elected president of United Air Lines by the company board of directors. He has been with the company since 1931 and was previously vice-president of the company.

# WHAT HAS THIS TO DO WITH BROACHING?



ONE of the earliest and most important engineering discoveries of all time was the lever, whose force potential moved a wise ancient to declare that . . . if given a lever large enough, and a star to serve as its fulcrum . . . he could move the world! Although, in its pure form, an earth-moving lever is impractical, the lever today performs, almost unrecognized, a multitude of useful functions. Its truly earth-moving potentialities are to be found in the lever's formula of power application . . . energy + ingenuity = efficiency!

It seems a far cry from the claw hammer to a huge rolling mill, whose huge red-hot ingots are transformed as if by magic, into water-fire sheets . . . yet the principle remains constant. You couldn't beat out miles of thin steel plate with a carpenter's hammer . . . nor could you pull out a hard driven spike with your fingers. Both are examples of the lever's theory that a minimum of energy correctly applied can not only move the world . . . but can make the world a better place to move in.

**BROACHING** is a further development of this principle. Eliminating needless operations and speeding up production, it requires less energy to produce more . . . resulting in fewer men and machine hours to produce each part. Parts mass-produced in a fantastic variety of complex shapes and sizes to uniformly close tolerances, it will pay you to investigate the possibilities of broaching in your plant.

Just as Lapointe pioneered in the designing of broaches and broaching machines for the mass production of precision parts . . . so too, will Lapointe continue in its quest to make better things for a better world . . . quicker and cheaper!

Earliest use of broaching principle on this continent was by soldiers of the Revolution, who drove steel balls through heated rifle barrels to give the correct bore.



The **LAPOINTE** Machine Tool Company  
BROACHING, BROACHING MACHINES, AND BROACHING MAGNIFICENT

**Alfred Rogers Hagler**, Washington editor of *Examiner* magazine, has left for the China-Burma-India war theater as the first woman to cover that theater exclusively. One of her main studios will be the failure of air transport in China and India. She formerly wrote for the *New York Times*, did free-lance work in Washington, has been governor of the Washington District for the Aviation Writer's Association, and is a former chief of information for CNA.



Three members of the Baltimore staff of *Pennsylvania Central Airplane* have completed courses in air transportation at the University of Baltimore. Graduates are **Marshall V. Budge**, traffic representative; **Charles G. Hall**, chief agent, and **Charlotte H. Lewis**, ticketing agent.

**R. G. Wisegard**, industrial engineer for *Timken Roller Bearing Co.* for the past six years, has been appointed assistant chief engineer for the industrial division.

**G. L. Earl** has been appointed vice-president and a member of the board of directors of *Acme Aluminum Foundry*, Chicago, in direct sales and sales development of new products for the company, producers of aluminum, bronze and magnesium castings.



costings. In 1942 and 1943 he was lent as an advisory capacity to *Big Gun*. At R. C. Glancy, chief of tank automotive crane, Denver.

**Ned J. Shepley**, formerly liaison officer of the Canadian government's trans-Atlantic air service, operated by *Trans-Canada Air Lines*, has been appointed supervisor of flight control for TCA, with headquarters in Memphis. He will be responsible for the development and maintenance of flight control procedure for the entire TCA system.

**Cassius W. Gordon Becher, Jr.**, deputy director of the Navy Department's public relations division, has been detached from duty to assume a command at sea. His successor will be **Candor, George W. Campbell**, now chief of staff at Navy public relations at the director, security office.

**Alfred F. Hinzman**, assistant director of public relations and editor of the

#### HEADS FIELD SERVICE:

**D. K. Tasker**, assistant director of military contacts of *Republic Airplane*, is making a trip which will take him to every continent base where *Republic P-47 Thunderbolt* are operating, which means around the world. Tasker organized *Republic's Field Service* that has technical representatives at all Thunderbolt bases.

**Volschner**, home organ, since October, 1943, has been named assistant director of public relations of *Vulture Field Division*, Denver. **Chief Charles Gooden**, associate editor and photographer of the *Volschner*, has been named acting editor.

**Harold G. Davis** has resigned from the *Aeronautical Chronicle* of *Cincinnati* after serving as acting manager of the legislative department.

**Robert L. Robinson**, assistant to the general traffic manager of *Transcontinental and Western Air, Inc.*, has been promoted to sales promotion manager. He will work with TWA's sales manager **Clyde Patterson**, and will be in charge of sales promotion throughout the airline's coast-to-coast system. His headquarters will be in Kansas City. He has been eastern regional manager of TWA's public information department.



**Boyle Keck** has been named works manager of *Consolidated Vultee's* Louisville division. He was promoted from factory superintendent to replace **K. L. Leavitt**, who is being transferred to the New Orleans division as works manager. Keck was formerly with *Vought Aircraft Corp.*

#### TELLING THE WORLD

• **Eastern Air Lines** and **Pan American Airways** have launched a joint advertising campaign to publicize their newly arranged joint service between New York and Mexico City. Initial ads have been run in New York and Washington, D. C., morning newspapers and were prepared by **Campbell-Bowditch Co.**, Inc., Eastern's agency. Similar ads are scheduled to appear in evening newspapers in the same city under the direction of **J. Walter Thompson, Inc.**, Pan American's agency. All ads measure 600 lines.

• **Aerona Aircraft Corp.**, airplane manufacturer of *Model 1000*, Chgo., has returned **Alden B. Calhoun**, New York, as publicity and public relations counsel. Calhoun's organization has specialized in industrial public relations. A special *Aerona New York* office at 350 Fifth Avenue is being opened Sept. 1.

• **Ford Motor Co.** has appointed **Walter Thompson Argentina & S. L.**, the Argentine branch of **J. Walter Thompson Co., Inc.**, to direct its advertising in Argentina, effective Dec. 1. Ford already is advertising in Mexico through *Thompson*.

• **Taylorcraft Aviation Corp.**, Allentown, Ohio, has moved its advertising through *Grosswald-Mohrman Co.*, Cleveland.

• "**Congressmen, Navy Pilots**" is the theme being used by *Grumman Aircraft Engineering Corp.*, in ads showing actions of newspaper stories concerning recently reported accomplishments of Navy fliers. Measuring 500 lines, the ads are scheduled to appear two to three times a month in dates in key titles. A campaign in popular and technical aviation publications will be opened in October. **Charles W. Hunt** is the agency.

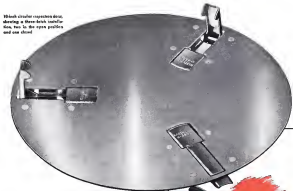
• **Gilbert Bokas**, with **Pearl & Whitney Division**, United Aircraft, and for five years sales promotion manager, *Rock O'Brien Co.*, has joined the advertising and sales promotion department, *Servel, Inc.*, New York.

• **War Department**, in cooperation with the *National Safety Council, Inc.*, has released a pamphlet titled "Private Drop Has Mined the War," which illustrates 12 simple, to-use safety rules. A survey showed that a 61 percent reduction in furlough accidents was effected during the period the pamphlet was used at certain ground camps.

• **Thompson Products, Inc.**, has named a *brochure*, "A Decade of Achievement," reviewing the growth of the company in the last 10 years.

• **P. W. Litchfield**, chairman of the board of *Goodyear Aircraft Corp.*, Akron, has named a *bulletin* entitled "History's Lesson to Air Power," a reprint of a talk he gave recently to sales executives of *Goodyear Tire and Rubber Co.*

Black circular inspection door, showing a three-inch inspection door, run to the eyes position and one closed.



## New Door Latch Speeds Plane Inspection

As much as 30 minutes can be saved in the inspection of a single plane, when you use the new **Hartwell** latch on inspection doors. It fits flush with the outer surface; weighs less than 4 oz. The **Hartwell** latch has been approved for use on aircraft by the *Army Air Force*, and can be installed in a standard *Army Air Force* outlet, part 482853. Write or wire our Los Angeles office for complete engineering details.



Designed and engineered by **Hartwell**, the new inspection door latch eliminates the slow removal and replacement of inspection doors. Press the trigger and the latch is released. Press the lock and it is locked in place.



It fits—fits, pulled free.

The **Hartwell** inspection door latch consists of four parts: Trigger and bolt, made of forged sheet steel, aluminum bracket, and two springs.



Because of its design and construction, the **Hartwell** latch can be used with various, plastic or plywood of varying thicknesses, and on inspection doors of any size or shape. An multiple latch installation no longer is required.

Simple move for 770 different aircraft production parts and tools

## HARTWELL

AVIATION EQUIPMENT COMPANY

3417 Crestview Boulevard, Los Angeles 16, California  
Buller, Texas • Detroit, Mich. • Kansas City, Kansas



# METAL · MODERN · *Magnificent!*

You'll always eye your SILVAIRE proudly. Gleaming, enduring metal, like today's rugged and victorious battleplanes. Built to fly comfortably, frequently, too. Designed to elicit every regard. The SILVAIRE has been proved by wartime use in the C.A.A., War Training Service, Civil Air Patrol, in the Armed Forces. It has had hard use the world over. It has long been approved by discriminating owners and pilots for its all-metal construction, efficient aerodynamic design, its beauty. Your SILVAIRE will be improved by our experience in fabricating warplane assemblies. It will again be styled to magnificence by America's top designers. And it is wisdom to enjoy its low depreciation and operating cost, its easy repairability, freedom from maintenance and high resale value. These less obvious excellences also further your long run pleasure in the possession of The Luscombe SILVAIRE.

WAR WORK for the duration is our business. Our job continues to be the production of such vital parts as tail assemblies, ammunition boxes, bomb bay doors, engine enclosures, gunners' seats, carburetor assemblies, machined parts and dozens of other elements for such famous war planes as are pictured here. However, the War Production Board has released an ample supply of parts for the maintenance of the four-year pre-war production of SILVAIRES now in daily use.



EASTERN AIR "Geeper"



CURTIS C-47 "Commando"



GRUMMAN F4F Corsair

These are a few of the planes for which Luscombe is fabricating metal assemblies.

## *The Luscombe* SILVAIRE

YOURS WHEN THE WAR IS WON, the new and distinguished Luscombe SILVAIRE is the belated product derivative of a long line of all-metal planes . . . proved, improved, smartly styled.

You are invited to write for full information NOW.

Please direct your inquiry to Department B

# LUSCOMBE AIRPLANE CORPORATION

\*\*\*\*\*

*Freehold, New Jersey*

## AIRCRAFT PRODUCTION

### Parliament Group Urges Canadian Industry to Seek Transport Orders

Any further airplane contracts from U. S. and Britain "should be with respect to Army transports rather than fighter craft and bombers," committee recommends; production program of Dominion is more than two-thirds complete.

With the Canadian aircraft program more than two-thirds completed, the Parliamentary Committee on War Expenditures recommends that further orders for planes from the United States and Great Britain "should be with respect to Army transport planes rather than fighter craft or bombers," and urges immediate planning for post-war.

The committee says through June 30, 1944, Canada has delivered 12,566 planes. Backlog now is only 5,393 more, mostly Mosquito bombers and light fighters, Lancaster bombers and Curtiss Helldivers. Some of these orders may not be completed due to cut-backs.

**17 Types Produced**—Production has involved 17 types, the seven planes now in production accounting for 16,000 either delivered or on order. The Canadian government has extended aircraft capital assistance of \$88,242,500, of which \$15,569,900 represented facilities for aircraft overhaul.

Of 1,590 Mosquito aircraft ordered from de Havilland Aircraft of Canada at Toronto, 878 represent bombers, 775 fighter-bombers, 97 as trainers. On June 30, the government had accepted delivery of 237 Mosquitos.

The government-owned Victory Aircraft Ltd., of Toronto, has delivered \$1 of a total order of 990 Lancaster bombers, while about

one-fifth of total orders for Curtiss Helldivers has been filled by Canadian Car and Foundry Ltd., of Port William, Ont., and Fairchild Aircraft of Canada, at Montreal. Canadian Car orders totaled 1,833, with deliveries of 328. Fairchild had orders for 705 and had delivered 175.

**Boeing of Canada**—Boeing Aircraft of Canada, at Vancouver, has delivered 323 out of 368 B-29 Superfortresses, and Canadian Vickers Ltd., of Montreal, 212 of 368 ordered. Noorduyn Aviation Ltd., Montreal, has received a total order for 1,166 Norseman transports, largely from the United States Army, of which 539 have been accepted. Among trainer planes still in production 1,289 Avian V twin-engine aircraft, produced by Federal Aircraft Ltd., Toronto, government-owned, and sub-contractors, have been ordered, of which 143 have been delivered. The Howard single-engine trainer, made by Noorduyn Aviation, Montreal, was ordered for a total of 3,120 aircraft, of which 2,275 have been delivered. Other types now no longer produced account for total production of 5,776 aircraft.

**Financing**—Capital assistance for the Avian production amounted to \$2,524,189, for the Curtiss elementary trainer (Fleet Aircraft mainly), \$1,455,000, for the Mosquito,



STINSON TURNS OUT 2,000th "FLYING JEEP":

The Stinson L-4 biplane, used in every warfare for scouting, communications and hospital work, is the 2,000th to come off the line of the Stinson Division of Consolidated Vultee Corp., at Wayne, Mich. Coincident with production of this Flying Jeep was a meeting of directors and division managers. Left in right, top row, are A. M. Hall, new division manager, Elizabeth City, Joe Stevens, division manager, Nashville, A. H. Skadd, assistant to the president, R. B. Perichant, director of industrial engineering, C. W. Collins, division manager, Vulture Field; C. T. Leigh, vice-president, L. R. Cooper, new division manager, Miami, T. Y. Smith, acting division

manager, Stinson division, Wayne, Harry Woodhead, president, A. E. Shelton, new division manager, Alteston, M. A. Hansen, director plant protection, R. S. Fleet, director plant facilities, R. F. Jones, assistant to director, plant engineering, Earl A. Boase, director of public relations. Left to right, kneeling, are H. A. Sutton, director of engineering; L. K. Grant, assistant controller; I. L. Ladd, executive vice-president; J. L. Kestler, division manager, San Diego; W. L. Jones, division manager, Louisville; V. C. Schoenlemer, controller, San Diego; B. W. Sheehan, engineering manager, San Diego; R. G. Meyer, division manager, Fort Worth.



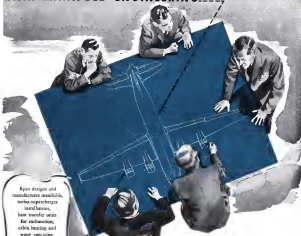
## WAR-BORN FOR THE AIR-BORNE



### A LEADER IN FINE AVIATION OILS

Made to meet the rigid specifications of the aviation engineers of the U. S. Army and Navy is one of the world's largest oil refineries . . . D-X Aviation Oil is now available for aviation use—subject to military priority. Your inquiries are invited.

MID-CONTINENT PETROLEUM CORPORATION  
TULSA, OKLAHOMA



Ryan design and manufacture manifolds, turbo-supercharger installations, heat exchanger units for exhausts, extra heating and wing anti-icing, flame dampers, and other specialized exhaust system applications.

## ... IN THE DESIGN STAGE means lower weight, better performance

To plan the exhaust manifold system when the original design for the airplane is being made saves costly engineering time, brings reduction in weight, and results in better performance. In a typical instance a Ryan manifold design saved forty-eight pounds in the weight of a military transport plane.

By planning with Ryan during the design stage, the type of manifold system and installation best suited to your specific requirements can be readily ascertained.

Whether planning to use Ryan ball and socket type or slip-joint type manifolds, let Ryan work with you in the design stage. You will obtain a superior product and maximum performance, and, in wartime, lower weight is peace-time, bigger payload.



# RYAN

RELY ON RYAN TO BUILD WELL 1922-1964

Ryan Aeronautical Company, Inc. 3400 Main Street, Montreal, Quebec, Canada, Ltd.  
 Toronto Office—429 Lexington Avenue—New York 17, New York

DESIGNERS AND BUILDERS OF COMBATANT TYPE AIRPLANES AND EXHAUST MANIFOLD SYSTEMS

\$10,000,000, for the Harvard, \$3,357,000, for the Hurricane (produced by Canadian Car & Foundry), \$750,000, for the Lancaster, \$7,313,000, for the Navigator, \$1,076,300, for the PRV Catalina, \$11,031,000, and for the Curtiss Mohawk, \$6,213,000. In addition there is a general assistance item in the report of \$1,500,000.

The Committee recommended that all aircraft plants study the profit-sharing plan in operation by Canadian Vickers Ltd., Montreal, and that it should be used throughout the industry as far as possible.

## 69 Firms Turn Out Parts for New Mars

Martin Company in production on 20 craft for NATS.

The manufacturing program on the JRM Mars—world's largest production airplane—is now in operation with 69 manufacturers in 27 cities in 12 states turning out sub-assemblies and components for Glenn L. Martin Co., which is building 24 of the 72½-ton craft for the Naval Air Transport Service.

Sub-contracted items for the flying boats, sister-ships of the original Mars now in operation in the Pacific for NATS, include wing tips, flap, control surfaces, doors, landing gear, exhaust stacks and interior equipment, stairs, bolts, hinges, fittings and a wide assortment of small machine parts and accessories.

**Spartan Aircraft**—Largest of the sub-contractors is held by Spartan Aircraft Co. of Tulsa, only subcontractor on this job located west of the Mississippi. Spartan is building wing-tips, tailfins, stabilizers, elevators, fins, radars, flaps and tabs for the transport.

**Bellanca Aircraft Corp.** is turning out wing flaps and door ribs and **Ferracute Machine Co.**, Bridgeton, N. J., is making the massive landing gear.

Exhaust stacks for the engines are from **National Radiator Co.**, Bensenville, Pa. **Warren Macchett Corp.**, of New York, is supplying seats for the pilots and crews while **Tabula** for the navigator and radio operator are in the works respectively at **Eastman Metal Works**, Eastport, Pa., and **Chrysler Corp.** of Detroit.

**Other Parts Fabricators**—Control columns and quadrants are being assembled at **Ritter Co., Inc.**, Rochester, N. Y., ladders and stairways at **Kellert Aircraft**, Philadelphia,



## BRITISH WOOD EXPERTS VISIT GINDLER CORP.

Three members of the British Wood Aircraft Mission reported the Thorne Division of the Gindler Corp. at Leamside in their study of Thorne's high frequency unit used to speed up production of plywood and laminated wood used in plane construction. Left to right are J. Latham, Dr. F. T. Barwell, Lyman L. Dawson, vice-president of the division, and A. R. Linn.

and Charles T. Weirick, Inc., Baltimore. Air Utilities, Madison, Tenn., is making crew lockers.

Machine shops predominate among the sub-contractors but there are companies on the list whose peacetime output is far removed from aircraft production. For example the All Purpose Bell Corp., of Brooklyn is making bell crank housings, Aircraft Engineering Co., of Baltimore is making gear splices and belt assembly fittings. Others include General Oilburner Co., Baltimore; Marex Chemicals, Inc., Sellersville, N. J.; National Advertising Co., Westminster, Md.; Post-O-Graf Co., Truckeeville, Pa., and Allen Sticker Co., Allentown.

## Aircraft Plywood Studied by British

Use of plywood for aircraft parts is being studied by British Forest Products Laboratory's wood experts who are now making a return visit to the U. S. Forest Products Laboratory at Madison, Wis. Last year an American mission studied British uses of wood, plywood, phenolics, and plastics.

Representatives from the Royal Aircraft Establishment and Ministry of Aircraft Production are among the men visiting this country. They have traveled over the

West Coast area, some sections of the South and plan to visit Massachusetts and Canada before returning to England.

## Canada Organizes JP Research Firm

Government-owned company to take over plant and equipment used in Dominion's original experiments started in 1942.

**Turbo Research, Ltd.**, to carry out design and development work on jet propulsion for aircraft and gas turbines as a peacetime project has been formed by the Canadian government to take over the plant and equipment set up in Canada in 1942, when the government first became interested in jet propulsion.

The head office and main research works will be at Leaside, Ont., outside Toronto, adjoining the government-owned Research Enterprises, Ltd., manufacturers of optical glass, optical instruments used as range finders, and secret radio equipment.

**Permanent Research Group**—The permanent organization for research and development in connection with jet propulsion, gas turbines and all related devices will work closely with a similar committee established in Britain. A staff representative will be estab-

lished as London to keep in close liaison with the British company. President is M. J. Carmichael, co-ordinator of production, Department of Munitions and Supply and, before the war, general manager of General Motors in Canada. Vice-president and general manager is Brig. F. C. Wallace, of Research Enterprises, Ltd.

## Army Tests New Twin Rotor 'Copter

Flight experiments at Wright Field reveal AAF's first year's work on Platt-LePage model.

An Army helicopter development program as secretly for four years, as revealed in the announcement by the AAF Materiel Command that the Platt-LePage dual-rotor helicopter is now undergoing tests at Wright Field.

Labeled the XR-1, and following a design similar in many respects to the twin-rotor German Focke-Achgelis helicopter, the American-made "whirlwind" history dates back to mid-1940, with its military counterpart preceding the Sikorsky models which have now gone into mass production.

**Counter-Rotating Blades**—Twin rotors, each 30% fast in diameter, turn in opposite directions at the ends of two streamlined pylons projecting from the fuselage sides. Power is supplied by a 456 hp. Pratt & Whitney engine, enclosed and located approximately in the middle of the fuselage. Widely-spaced main landing gear is fixed on the pylons.

The fuselage resembles that of a conventional airplane, more nearly than the single-rotor helicopter design, and it has an emergency fairly conventional, except for the fact that the horizontal stabilizer is up quite high on



### NEW B-17 TAIL TURRET

An improved tail turret, greatly increasing the defensive firepower of the Boeing B-17 Flying Fortress, is shown in this new photograph. The range of the gun has been increased, the tail gunner's compartment has been extended to the tip of the tail cone, and the gunner has been given added protection of more bullet-proof glass and armor plate.

the vertical fin, apparently for better control. The craft weighs approximately 4,800 pounds.

**Transparent Plastic Cockpit**—The two-place tandem cockpit is largely covered with transparent plastic, even to the floor, giving excellent visibility.

Capt. H. F. Gregory, Materiel Command rotary-wing aircraft expert, says the Army is thoroughly exploring advantages offered by the dual rotor helicopter, as opposed to those of the Sikorsky type.

Asked about the possibility of a wing or rotor failing on the Platt-

LePage craft, Gregory replied: "The worst thing would happen to the XR-1 that would happen to an airplane if the wing came off, but there is no more reason for a pylon or complete rotor to give way on the XR-1 than for a normal airplane wing to fail."

**Experimental Model**—The model currently under test is designated the XR-1A, a revision of the original Platt-LePage XR-1 design which places the observer in the rear, in front of the pilot's seat. In AAF designation, X stands for experimental, R for rotary-winged, and 1, for the first design of its class.

While the Army has kept the Platt-LePage helicopter under wraps, Wm. Laurence LePage, president of Platt-LePage Aircraft, Edinburg, Pa., last October testified before the CAB concerning a 12-ft passenger helicopter transport design apparently a larger scale development of the XR-1, with dual rotors, and released a drawing of the proposed light craft. (AVIATION NEWS Oct. 11, 1943, Cover and page 7).

## New Wilder Wildcat

Disclosure that a new and faster version of the old Grumman F4F Wildcat is operating in the Pacific off the decks of a baby flat-top of the Casablanca class was made last week by the Navy.

The Wildcat, designed by Grumman, is now built exclusively by Eastern Aircraft Division of General Motors. Though replaced on fleet carriers by the Grumman F6F Hellcat, the new Wildcat are reported still making among the world's best light planes for carrier operations and the Navy reports they have shown themselves well able to cope with Jap fighters in recent combat.



## THE SHIP WITH THE *Built-in Tail Wind*

TAKE a 65 h.p. engine—put it in several different places. What happens? One plane will outfly and outclimb the others, and use less fuel. It's no secret—any experienced light plane pilot will tell you, "Sure, Taylorcraft outperforms any ship in its class."

Just as Taylorcrafts flew in front before the war, and have repeatedly proved their ability for numerous wartime activities, so the new Taylorcraft will again lead the

field when America eagerly picks up postwar flying.

As soon as current restrictions ease and Taylorcraft's war production responsibilities have been completely met, we want you to know what you can expect from Taylorcraft to make your flying safer and more satisfying than ever before.

Send us your name and address so you may be among the first to learn the news and details of Taylorcraft's newest developments.



World's Largest Builders of Side-by-Side Airplanes

TAYLORCRAFT AVIATION CORPORATION • ALLIANCE, OHIO



New Platt-LePage Twin-Rotor Helicopter Tested by Army: Shown is the XR-1A in hovering flight over Wright Field, AAF Materiel Command headquarters, at Dayton, Ohio. The craft follows a design basically

similar to that of the twin-rotor German Focke-Achgelis helicopter. While the American-built craft may reach military production, and while tests have been successful, it still is an experimental model.

# Air Power Through Piston Rings



## McQUAY-NORRIS

ALTNIZED

## PISTON RINGS

PISTONS... PINS...

**HARDENED AND GROUND PARTS**

More and more, the leading makers of aircraft motors are using McQuay-Norris precision parts. Our 34 years' experience in precision manufacture, our long and intensive work in metallurgy, heat treating, clinical research and laboratory experiment, enable us to turn out the sturdy, dependable parts demanded by modern aviation. Your inquiries are invited.



**PRECISION WORKERS IN IRON, STEEL, ALUMINUM, BRONZE, MAGNESIUM**



**McQUAY-NORRIS MFG. CO. (AIRCRAFT DIVISION), ST. LOUIS, U.S.A.**

CANADIAN PLANT, TORONTO, ONTARIO

### PARTS FOR AIRCRAFT ENGINES

Piston Rings  
Oil Sealing Rings  
Supercharger Rings  
Carburetor Parts  
Machined Aluminum  
Pistons  
Piston Pins  
Counterweight Check Pins  
Machined Magnesium Parts  
Cylinder Mold Down Nuts  
Harden and Ground Parts

### PARTS FOR PROPELLER ASSEMBLY

Machined Magnesium Parts  
Piston Rings

### EQUIPMENT FOR MAINTENANCE OF AIRCRAFT

Pistons for Oxygen  
Compressor  
Piston Rings for Oxygen  
Compressor  
Pins for Oxygen Compressor  
Pistons for Air Compressor  
Pins for Air Compressor  
Piston Rings for Air  
Compressor

### LANDING GEAR PARTS

Machined Aluminum  
Pistons  
Piston Rings  
Harden and Ground Parts

## Aviation Materials Indexed by SAE

164-page compilation presents comparable tables of specifications and numbers for original, interchangeable and substitute materials.

A comprehensive cross-index of original, interchangeable, and substitute materials materials used in aircraft, engines and accessories has been completed by the Society of Automotive Engineers for use of the United Nations' air forces.

The 164-page index presents comparable tables of the SAE, Army-Navy, Federal, Army Air Forces, Navy Aeronautical, British, Canadian and Australian specifications and numbers for original, interchangeable and substitute materials. Among these are ferrous steel, aluminum, magnesium, copper, nickel, tin, zinc, brass, and lead alloys, with chemical compositions and mechanical properties, used by United Nations Air Forces.

**Eases Shortage Problem** — The organization believes that service mechanics will be able to solve any shortage problems by use of substitute or interchangeable material when no supply of the original is available.

The work was initiated a year ago by SAE Aeronautical Division Committee after discussions with representatives of the Society of British Aircraft Constructors, British Ministry of Aircraft Production, British Air Commission, U.S. Army and Navy air arms and of the Canadian and Australian governments.

## Hurricane, Swordfish Production Complete

Production has been completed on two veteran British warplanes — the RAF's Hawker Hurricane, of Battle of Britain fame, and the Fleet Air Arm's Fairey Swordfish, the last of the fully operational biplanes.

The Hurricane started life as a single-seater fighter with eight 360 machine guns about 18 years ago. Since then more than 10,000 of them have been built. The Hurricane has been developed into a 15-gun fighter, a four cannon fighter, a tank buster with 40 mm. cannon, a fighter-bomber, a Fleet Air Arm, a catapult-fighter for carrier escort and a long-range



### CURTIS WRIGHT'S POST-WAR PLANNERS:

Members of Curtis-Wright Corp. Post-War Committee, which is developing plans for peacetime production, are shown here at a recent meeting in Buffalo. Left to right, are C. M. Leeds, Wright Aeronautical; James C. Williams, Curtis-Wright vice-president and chairman of the group; Dr. D. H. Dunsen (standing), Airplane Division, director of business research; Peter F. Rosenbaum, general manager, development division; Prof. Edward D. McDiarmid, business research consultant; Oscar Nelson, propeller division, it also on the committee.

fighter with auxiliary fuel tanks. **Fitted With Beekies** — The Hurricane also was the first fighter to be fitted with rocket projectiles. Although the Hurricane gradually will die out as existing planes are used up, it has successors, the rocket-carrying Typhoon and the Tempest.

The second veteran on the retired list, the Swordfish, is even older than the Hurricane. Designed as a Naval torpedo-reconnaissance-bomber in the early 1930's, it has taken part in landings on North African towns, landed British agents behind enemy lines and served as a transport maid-of-all-work to Fleet Air Arm units in the Western desert. Successor to the Swordfish is the Barracuda, also built by Fairey's.

## Engine Schedule Cut At Wright Plant

A sharp decrease in engine schedules at the Wright Aeronautical plant at Paterson, N. J., is reported by P. H. Taylor, vice-president and acting general manager, who said that by the end of this year monthly shipments of engines from the four Paterson area plants will have shrunk to less than half of last year's total production.

**Wood-Heide Plant Confirmed** — The schedule changes will have no effect at the Wood-Heide plant, where production of Wright Cyclone 18's for the Boeing B-29 Su-

perforter is on a full-scale basis. The cutback is another indication of the increasing emphasis on heavy bombers and less upon medium bombers and fighters, resulting from changes in the military situation.

## ACCA to Check on Technical Programs

Activation of a policy of industry endorsement of technical programs or engineering projects through the Aeronautical Chamber of Commerce was announced last week by James P. Murray, Chamber president and vice-president of Douglas.

Endorsement of matters to be submitted to government agencies by engineering departments, associations or other organizations can be obtained promptly by channeling the data through the technical department of the Chamber, Mr. Murray said.

**Management Needs Stressed** — He explained that, because of the entry of new organizations and the broadened interest of others in the field of aircraft development, the Chamber has felt it necessary to re-emphasize the desirability of providing industry engineering management with the opportunity to review and endorse any recommendations relating to formal requirements for design, performance, standards and engineering policies made to the government on behalf of the industry.

## Rate Reductions Present Problem On East and West Coast Service

Eastern considers adjustment to meet new schedule announced by National on New York-Miami flights; California-Honolulu rate competition developing.

Lowering of passenger fares on the New York City-Miami flights by Eastern Air Lines, Inc., to meet the new rates announced by National Airlines, Inc., has been discussed by officials of the former company and an early adjustment is expected.

As indicated in the table below, the fares proposed by National run around five cents a mile, while Eastern's rate is roughly figured at five and a half cents a mile. This results in a differential of less than two dollars on the New York-Miami fare. On the New York-New Orleans trip, however, the fares are the same.

► **Fares Compared**—Comparison of fares between New York City and key points on the New York-Miami flight follows:

New York to	National Eastern
Portland	\$15.65 \$16.00
Charlotte	16.55 16.19
Birmingham	20.25 20.50
Daytona Beach	21.85 22.50
Orlando	22.65 23.50
Tampa	24.55 25.00
W. Palm Beach	41.20 42.00
Miami	60.00 60.00
New Orleans	67.00 67.00

Meanwhile, on the West Coast, there has developed rate competition in proposed flights from California to Honolulu.

On Aug. 20, United Air Lines Transport Corp. announced that it would fly from Los Angeles and San Francisco to Honolulu for \$128 on a 10% heavy schedule. Nine days later Pan American World Airways announced proposed flights between mainland and island terminals in a "little more than 6 hours" at a one-way fare of \$56, or \$65.40 each way on a round-trip ticket purchase. During the interim, Matson Navigation Co. proposed fares of \$175 for day service and \$200 for sleepers, while Ryan School of Aeronautics plans to operate Pacific Air Lines and fly from the mainland to Hawaii for \$224.52.

While Pan American offers the lowest proposed rates, its service

is probably several years in the future because it must await delivery of new 120-passenger clipper. Construction orders for these aircraft depend, of course, on military priorities.

► **Costs Subsidized**—In a study of the need and pattern for the development of air transportation in the United States, the Department of Research Planning of American Airlines, Inc., pointed out that the ability probably to lower fares depended on the ability to lower direct flying costs of the airplane or the overhead costs of airline operation or both.

"The period from 1933 to 1941 witnessed the relative stabilization of the industry and some profit of operation," the report said. "During this period revenue generally exceeded expenses. This was not due to a reduction in costs. Total cost of operation per plane mile remained practically the same. The profit of operation resulted from a more intensive development of the industry and an increase in the load factor, i.e., an increase of revenue traffic proportionately greater than the increase of plane miles flown—more miles were flown per mile of route, more revenue tonnage was flown per mile and per mile of route.

► **Operations Intensified**—"Profit resulted from more intensive operation. The whole aviation industry experienced the same development.

"During the war period costs, direct and indirect, have risen and will continue to rise.

"Should the industry expand in such a way that a great many more miles of routes would be operated with low frequency of flights and low load factor, ability of the industry to reduce fares would be severely limited, and even with present fares, the industry could easily face disaster.

► **Costs Increasing**—"The trend of costs has been upward and this

higher level of costs can be expected to continue after the war. Estimates on equipment which will be available shortly after the war show that some slight reductions are being made in direct flying expenses.

"Unless we develop in such a way that overhead costs either remain relatively the same or decrease, we shall find that the reduction in direct flight costs is actually and inures to the public would of necessity remain the same, or go up. Subsidies would be the only alternative. An unaided, disorderly expansion might well jeopardize the solvent position of the industry for the next several decades, should costs of operation be materially increased."

## Grumman Salaries, Income Reported

Grumman Aircraft Engineering Corp. paid its president, L. R. Grumman, \$45,250 for the fiscal year ended Dec. 31, 1945, according to the company's annual report to the Securities and Exchange Commission.

L. A. Swirbul, executive vice-president, received \$40,250 for the same period, while \$21,250 was paid to W. T. Schwendler, another vice-president. The company paid \$57,164 to Harbison and Crumpton, its accountants.

John W. Gilliam, Jr., received \$21,734, of which \$15,400 represented his salary and \$6,334 his commissions as sole proprietor of Gilliam Aviation Corp., selling agents.

► **Sales**—Gross sales of the company during 1945 totaled \$276,448,273. Manufacturing costs and other expenses amounted to \$245,448,663, leaving a balance of \$30,999,610.

Net income before provision for income and excess profits taxes amounted to \$24,801,094. Deductions of \$26,250,323 for estimated normal income, warrent and delayed value added tax and estimated excess profits tax, brought the net income before credit for post-war tax refund to \$1,550,771. The latter item of \$1,855,000 brought net income to \$9,695,771.

After making provision for post-war re-adjustment of \$1,300,000, and the \$1,955,000 of post-war tax refund, \$3,355,668 was transferred to reserves, leaving a balance of \$6,340,103.

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► **Costs Increasing**—"The trend of costs has been upward and this

## 200,000<sup>th</sup> Manifold on its way to Victory!



JULY 31, 1945 Solar completed its 200,000th manifold and airplane exhaust manifold—a record for the company, its employees, suppliers and customers share with Solar.

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has been acquired in fabricating hard to handle manifold metal and similar alloys. Companies combined with such problems are invited to consult Solar. Address: "Management."



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## Transport Industry Urged to Speed Study of Proposed CAR Changes

ACC Airworthiness Requirements Subcommittee and ATA Aircraft Requirements Committee listed among major groups seeking to prepare program for consideration before year end.

By MERLEN MICKEL

Information from Civil Aeronautics sources indicates it will behoove aviation industry agencies to expedite their studies of changes they deem necessary in the transport category of Civil Air Regulations Government engineers, devoting increasingly more time to consideration of this problem, express hope that a proposed revision may be ready by the end of the year.

Few if any doubt that changes will be necessary, but the speed with which they may be effected can easily depend on the attention given the problem by the industry, and the latter's preparedness to deal authoritatively with alterations in the regulations when they are proposed.

**Major Groups Involved**—Among the major industry groups dealing with the question are an air carrier surplus performance subcommittee of the Aeronautical Chamber's Airworthiness Requirements

Committee, for the manufacturers, and a subcommittee of Air Transport Association's Aircraft Requirements Committee, for the airlines.

In addition, the situation is drawing much attention in West Coast quarters, as pointed out in AVIATION NEWS, Aug. 22.

Because of the war, only one model has been certified as a type, since the regulations went into effect July 1, 1942. That is the Vought Sikorsky VS-44 being used by American Export. The regulations didn't apply to any planes in service on that date, though they were written to apply to all aircraft after Dec. 31, 1943. The exception here was that the nearly six years intervening would be enough to retire the old types.

**Picture Changed**—The war has changed the picture, however, and now it is generally agreed that the date on which they will have universal application will have to be

put further in the future.

In the meantime, CAA engineers to have been cooperating with CAB staff members have had access to Air Transport Command experience on the larger craft, such as Douglas DC-4s and Curtiss Commanders, that undoubtedly would have been new types subject to the Civil Air Regulations had they not been pressed into military service.

Points of structural design, engines and propellers and equipment, and flight and performance aspects are among those on which the Army has passed along engineering data.

**Further Revision Likely**—CAA and CAB have been studying for more than a year what one official describes as the "further advancement of the regulation picture," and expect to devote additional time to it between now and the end of the year, in the anticipation that some revision may then be ready.

When that time comes, CAA will contribute its working knowledge to CAB, who will combine it with its own material and possible changes, then draft a release for submission to the industry and others interested for their reaction.

**Airworthiness Rules Studied**—The ACCA and ATA subcommittees are studying specifically part 04.33T of the regulations. The 84 section of the regulations contains those for airworthiness, and the part in consideration deals with planes in the transport category. ATA's interest stems naturally



R.A. Korman, left, of Flight Operations for T.C.A., starts Flight 12, Humpy, D.F.C., on his air line instrument flying course in the Link Trainer.

## Returned War Pilots JOIN TRANS-CANADA AIR LINES

The job of training returned airmen for peace-time commercial transport flying has begun in Canada. Already equipped for the fight crews of Trans-Canada Air Lines are a number of Royal Canadian Air Force pilots who have distinguished themselves on operational duties overseas.

The first group of veterans to join T.C.A. is shown above in Link Training quarters in Winnipeg. Left to right, they are:

Flight Officer R. J. WHITE—53 operational flights, including 14 solo over Germany, service in Egypt, Libya and Malta.

Flight Officer H. H. BUCKING—Control Command, Great Western, operational flights in Iraq and Ireland.

Flight Lieutenant R. L. MOFFAT, D.F.C., as member of Duxton Squadron, took part in several 1,000-bomber raids on Germany.

Flight Officer J. C. MORROW—54 operations in Wellington bombers service in Egypt and Libya.

Flight Officer C. E. FOGG—service in Scotland, Gibraltar, North Africa.

Their record of duty over and physically fit, these men are now learning air line procedures. Link instruction in instrument flying is an integral part of this training.

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## CONGRESSIONAL GROUP ON WEST COAST

Western Air Lines was host to the House Interstate and Foreign Commerce subcommittee when the group, named Los Angeles late this month on its field study of aviation's post-war possibilities. The subcommittee toured aircraft plants and conferred with plant officials at Los Angeles, W.A.L. headquarters. In the group here are, left to right, Thomas

Wolfe, Western's traffic vice president; Edward P. Weaver, Chief Aeronautics Board vice-chairman; Reps. Joseph P. Owens of Minnesota, Carl Albert of California, Subcommittee chairman Alfred L. Balch of North Carolina, and Richard P. Manton of Arizona; Leo H. Duerksen, W.A.L. executive vice president; and Edna J. Layton, committee clerk.

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#### SIGNING TWIN-CITIES COMMISSION CONTRACT

Chairman Lucius G. Carle, the Minneapolis-St. Paul Metropolitan Airport Commission, signs the contract which gives his group control over all airport activities within a 25-mile radius of the Twin Cities. The Commission was created by the Minnesota legislature, which also provided a \$1,000,000 appropriation for airport development. At left is Robert G. Adrick, Commission director, center (standing) Mayor John J. McDermogh of St. Paul, right, Mayor Morris Kline of Minneapolis.

from operational questions, while the manufacturers' basic interest is in the planes themselves.

Neither group has had a meeting, although members of both are studying the problems. Before any policy is formed, there will be an interchange of ideas, and it is interesting to note that at this stage—when some preliminary decision is reached—the Air Line Pilots Association will be called upon for its views.

**Opposed Weight Increases.**—This is the group that so vociferously and effectively opposed landing and takeoff increases at a Civil Aeronautics Board hearing not long ago. Manufacturers and the airlines and Aeronautics Administration engineers argued that the increases were practical but the CAB declined to permit them and the pilots won out.

Since landing and stalling speed requirements are high on the list of subjects for discussion, it is obvious that the pilots here again will have a lot to say about any proposed changes.

**Guard Safety Standards.**—Therefore those interested in CAR modifications are intent on seeing that increases in landing and approach

speeds imply no decrease in safety standards. This inevitably involves improved landing facilities, as higher approach and landing speeds obviously would require more space. A spokesman for the Chamber group says the ABC is interested in two primary considerations: increased safety and increased service to the public.

Questions put to the ABC subcommittee by Chairman G. S. Scharrer of Boeing in anticipation of the meetings it is to hold soon, probably in the Los Angeles area, deal with desirability of the present regulation permitting takeoff continuation subsequent to engine failure occurring prior to takeoff speed, possible simplification of present rules from an interpretation or testing standpoint, the present 50 mph stalling speed requirement, the "fundamental problem" of definition of approach speed and approach stalling speed, stability requirements and whether they result in a good flying airplane or "use of crutches which are deleterious to good flight characteristics", hot day takeoff problems, rate and angle of climb, reversible pitch propellers, landing gear, need for two engine

flight requirements on four-engine airplanes with respect to allowable gross weight, particularly for overwater operation; proposal that passenger air carrier aircraft be licensed automatically at a higher gross weight by percentage for cargo, and stalling speed modification theories, and cooling requirements.

Scharrer urged the commission to consider these questions not only as manufacturers but "more particularly from a standpoint of the airline passenger since the risks have been set up by definition to protect the airline passenger."

#### Army Plane Returns May Hit 298 Ceiling

Informed airline circles doubt that the number of planes returned by the Army will reach the 300 limit set for the airlines by executive order. The equipment total is expected to stop at 286.

Reason is that the Army, these sources say, arrived at 300 arbitrarily as the number calculated to bring seating capacity to what it was when the big takeover occurred in May, 1942.

**Larger Credit Returned.**—Since some Douglas DC-3's have gone to Mid-Continent and Continental, in place of the smaller Lockheed's they gave up, total pre-takeover seating capacity is expected to be attained before the 298 ceiling is reached.

Civil Aeronautics Board people remark with the situation still, however, that the 298 ceiling will be reached, and see the reason why more planes should not be turned over to the airlines if the Army can spare them. The 300 ceiling, which increased the gross load by 100 pounds, was the Army's idea in the first place, the CAB recommending that the previous ceiling be removed entirely.

**Various Types Released.**—Airline equipment now stands at 294 units, compared with 324 before the 1942 reduction, which cut the airlines to a low point of 186. The first 87 returned after the 293 ceiling was turned were DC-3's. Since then various types have been allocated. They include three DC-3's to Mid-Continent, two to Continental and one to Inland, five Boeing Stearman's to TWA, two DC-3's to All American Aviation, two Lockheed Electras to Eastern, and two Lockheed's to National, bringing the total to 274.

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## New TACA Subsidiaries Revive Rivalry with PAA in So. America

Acquisition of Venezuela and Colombia routes shifts ancient battle for Latin trade from Mexico and Central America to lower half of Hemisphere.

Renewal of an old airline rivalry in a new setting—South America—is evident in announcements by TACA of new subsidiaries in Venezuela and Colombia. Further south on the continent, TACA has a line operating in Brazil, and plans an Argentine company when U. S. relations with that country improve.

This expansion is viewed as TACA's bid for some of Pan American Airways' business in South America and will transfer the constant leap existing between the two lines in Central America. With permits granted by the Mexican Government for TACA to begin service into that country from El

Salvador, and by Guatemala for TACA to resume routes there which were discontinued several years ago, TACA has scored two aerial victories over Pan American.

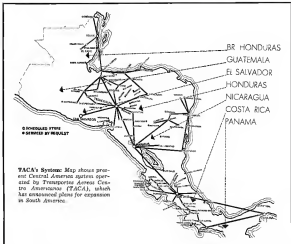
**Mexican Front**—Re-entry of TACA into Guatemala is a direct outgrowth of the recent political upheaval in that country. According to TACA sources, the line pioneered air service in Guatemala, furnishing fast transportation for cargo and increasing tremendously both the inland market and the country's revenue. The then president, Jorge Ubico, was prevailed upon to accept discarded planes of another airline, technical

and maintenance assistance and launch a Guatemala national air service. Without preliminary notice, TACA fields were taken over and the line ordered to cease Guatemala operations.

After Ubico was deposed last Spring, the new president sent for TACA's president, Lowell Yeres, and offered a new franchise. Yeres has agreed to take over the Chile trade again, but resumption of service must await equipment.

**May Get Army Equipment**—TACA officials have been active in Washington recently and the promise of used Army aircraft is now definitely bright. It is believed that this circumstance, combined with others, is the reason Yeres recently turned down an offer by British interests to buy control of the Central American system. A TACA spokesman declared Yeres refused the British bid "for the express reason he expected certain things from this (the U. S.) government."

It is pointed out that TACA is



TACA's Systems Map shows present Central American system operated by Transportes Aereos Centro Americanos (TACA), which has announced plans for expansion in South America.



**Paraguayan Air Services:** Twice the size of Great Britain, Paraguay offers excellent opportunities for development by air; it has only 300 miles of public railways, 442 miles of private industrial railroad, and 2,760 miles of roads. Six airlines are operating there, including LATN, Paraguayan Air Arm line. Others include Pan American, Corporación Sudamericana de Servicios Aéreos, S. A. (Argentina), Línea Aérea Nord Este (LARE, Argentina), Correio Aéreo Nacional (CAN, Brazil), and Pousa do Brasil, affiliate of Pan American Airways System.

now a U. S.-owned line, with TWA, but, holding roughly 18 percent of the stock, it should be handled by the U. S. government in the same manner as any other U. S. line engaged in foreign operations. The line seeks as soon as possible U. S. help in its application for permanent license service. If this is granted, plans are to construct a major base somewhere as all TACA's planes are manufactured in this country and the company has been handicapped in not having a domestic delivery point for its aircraft.

► **Blue 50 Planes**—TACA's present fleet of some 50 airplanes range from DC-3's to old Ford tri-motors, and include the only two "dumbo tankers" in existence. These each carry 4,200 pounds of diesel oil to supply gold mines at Neptune and La Luz, Nicaragua.

The oil trade is only one feature of the cargo operation developed by Yerec since he began an air service with a five-passenger Bim-

son 12 years ago in Honduras. Last year, TACA flew 13,000 tons of cargo.

## Paraguay Organizing National Airline

LATN to be opened by country's Air Arm Command carrying passengers, cargo and mail.

The Paraguayan government has authorized establishment of a national domestic airline known as Línea Aérea de Transporte Nacional (LATN), operated by the Paraguayan Air Arm Command, to carry passengers, property and mail.

In addition to being an instrument for internal development, the new line may offer considerable competition to the five other airlines operating in Paraguay.

► **Heavily Underwritten**—The line is heavily underwritten by the government, which will donate

five planes valued at \$50,000 (B177,750) to begin operations. A three-man directorate, headed by the Commander of the Air Force, will manage the line.

LATN already has several special privileges including exemption from all present or future government or municipal taxes. It may use Air Arm Command bases under conditions to be established in each case, and may establish offices in each Paraguayan post office. It also is authorized to enter into agreements with other airlines looking toward improvements of service.

## Ryan to Name Airline Tax Study Group

National Advisory Committee to aid CAB in investigation of multiple taxes.

Oswald Ryan of the Civil Aeronautics Board expects to name this week a national advisory committee to assist CAB in its study of multiple taxation of domestic airlines. The board's recommendations for a solution of the multiple tax problem must be delivered to Congress within six months from the passage of the Revenue Act in July.

► **Headed by Mitchell**—At Los Angeles, Ryan said the committee appointed by him as chairman of the investigation will not be unduly large but will be adequate to give full representation of the varying views of states as well as air lines. The board has appointed George W. Mitchell, tax economist of the Federal Reserve Bank of Chicago, to direct the study.

The investigation will be important to air carriers because of the significance of the May 15 Supreme Court decision supporting Minnesota's taxation of interstate air lines, although half a dozen other states also taxed the same equipment. Although sharply divided, the Supreme Court majority held that Minnesota was justified in its taxation as Northwest's domiciliary state. The high court held also that the question of other states' rights was not before it. Individual justices voiced the belief that the problem of multiple taxation was one for Congress to settle, and a result of this expression was the Balzwinkle Bill.



## How Four Leading Manufacturers are Helping Save Precious Paper for Uncle Sam

► **A BIG OIL COMPANY**—"In 1943 we reduced the number of issues of our house publication from 12 to 6. Our employees house organ was reduced in size as were our dealer window displays, and all promotional material was kept to the smallest possible size."

► **A BIG DRUG COMPANY**—"The weight of our corrugated board was reduced to the minimum necessary for protection to our goods in transit. The weight of board used on some items was cut almost in half. We increased the pack per shipping case on many items where doubling of the quantity in each case would not result in an untwenty or hard-to-handle boxes, partitions and liners were dropped right and left. Package liners have been dropped except on one item."

► **A BIG CEREAL COMPANY**—"Where 100-pound linen-weight paper had been specified as desirable, the

lightest practical weight is now used. All papers and forms are carefully checked for adhesion to meet standard smaller size, excessive margin, and number of pages or parts. The Company has adopted single typewriter spacing where practical, typing on both sides of the sheets, proving film, and all such miscellaneous practices. Wastepaper at our plants and offices is not burned but baled to reach paper mills for conversion."

► **ANOTHER BIG DRUG COMPANY**—"In 1945 we stopped making an almanac. We had been sending out around twenty million. We also discontinued our small booklets, the edition of which was some thirty to thirty-five million. For 1944 we kept the lun on booklets and also cut out the printing of twenty million calendars."

These quotations are from reports to the A. M. P. Paper Committee.

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## Airport Management Leaders Hold 1st Southeast Conference

Existence nearby of wartime Army fields, lack of state financing programs, "big airport" thinking and death of trained personnel among topics discussed at Alabama Polytechnic Institute talks.

By WILLIAM G. KEY

Although airport planning in the southeast is not so far advanced as in some other sections of the country, more than 100 city, state and county officials last week attended the first Southeastern Regional Airport Management Conference at Alabama Polytechnic Institute in Auburn, Ala.

States with aviation communities have been more active than others in preparing programs. But even in those states there has been some lethargy in communities.

Several factors involved drew major interest in the discussion: **►** The existence of many Army fields relatively near these towns throughout the southeast.

**►** Lack, in many instances, of state financing programs both for construction and maintenance.

**►** "Big airport" thinking, which is something this conference was designed to counteract.

**►** A dearth of trained personnel that forces, in some states of the

section, almost total reliance on an understaffed Civil Aeronautics Administration to advise cities and towns as fast as might appear profitable from planning standpoint.

In addition to the community officials, CAA, airline airport experts, fixed base operators, personal aircraft manufacturers and state and city aviation officials attended the sessions, sponsored by the college, the CAA, and the Alabama Aviation Commission.

**► S. C. Progress:** Considerable interest was expressed in the South Carolina airport program, under which it is proposed—and it may be done by the law creating the aviation commission—that the state take over and operate all airports. The state now maintains these airports, except where they are under lease to the service, financing the program by a six-cents-a-gallon gasoline tax that goes direct to the commission.

The commission has been in op-

eration six years, now has a staff of 15 persons and maintains machinery and crews for the airport maintenance program as well as engineering and research divisions. **► War Effects Evident:** Some concept of the impact and the benefits of the war as southern states can be gained from the airport statistics of South Carolina. Before the war, the state had four paved airports. Today there are 24. The Army controls all 24 today, probably will turn virtually all back.

Alabama, with 30 designated airports now, will have 33 additional ready for construction when the war is over. Mostly Class One and Class Two ports. In all, the state will have 118 under the CAA master plan. The program of 30 being prepared as the first unit in the building up of the overall plan.

South Carolina, Alabama and Tennessee have active state commissions, with Tennessee's being previously named at an educational program. Other states have advisory committees, but the planning responsibility is chiefly that of cities and counties, and the attendance at Auburn indicated that the biggest task lies in assistance to communities interested in aviation yet not having the technical experience in the community to take advantage of that interest.

## Ship/Firms See Loss In Trade to Airlines

United Fruit officials stress need of steamship owners to effect competition by air services.

Additional evidence that steamship operators are becoming increasingly concerned with the competitive effect air transport will have on their passenger traffic was supplied last week by William K. Jackson, vice president and general counsel of United Fruit Co., who said "it is generally conceded that within five years steamships will have lost to the airplane from 80 to 90 percent of their present passenger level."

Steamship companies seeking to offset this competition by operating air services themselves, stress the point that they expect to be able to operate such services without government subsidy. They point to the fact that previous United States air service to Central America has been heavily subsidized, although many steamship lines have operated without subsidies.

**► Exhibits Filed**—United Fruit

Co.'s views were outlined in exhibits filed with the Civil Aeronautics Board as the company's presentation of its case in the Latin-American proceeding, scheduled for hearing Sept. 18.

In describing the United Fruit exhibits, Jackson also touched other points generally indicative of the steamship operators' position. They included the following: Heavy war losses sustained by steamship operators make coordinated air-steamship service "absolutely necessary" if they are to maintain their former position in passenger trade. Steamships require considerable time to replace, but air service would bridge the interim.

**► Exhibits**—Government introduction of future shipbuilding would be highly uneconomical unless measures to ensure the ships' full use are taken. Coordination ship-air service would develop both forms of travel.

Steamship companies have maintained experienced staffs in Latin America for many years. These would be available for serving passengers under coordination.

It is difficult to operate air services in not great steamship lines, competition from air lines may curtail their profits so seriously as to require government subsidy to maintain a merchant marine.

## Suburban Service

Park Air College is thinking about extending the shuttle idea contemplated in its feeder line proposals to fast suburban services at the St. Louis, Chicago and Detroit metropolitan areas.

Some of the planners in Park Air Transport, Inc., the prospective feederline operator, visualize as many as a dozen round trips a day on four or five routes out of each of these centers.

Closed to the type of planes these officials believe would be necessary for the operation is General Motors Model 30. They say they may ask manufacturers to bid on a 40- to 50-passenger plane with 150 mph cruising speed and 60 to 75 mph landing speed, figures about 30 would be needed in each place where this type of service was provided.

Both local and express service will be offered if their plans are realized.



Specifications for the construction called for the utmost precision in the finishing of the small gears into the assembly of the B-24's Cowl Flap Screwjacks. As can be imagined, having and other finishing operations had to be carried out with considerable dexterity to stay within the extremely close tolerances.

How to buy and finish these gears? That was the problem. The manufacturer, Leas Airc Inc., Piquette, Ohio, as so many others, turned to LEA for the answer. A LEA technician visited the plant, studied the operating requirements and recommended the methods and compositions. Changing to the LEA Method resulted in considerably increased production and reduced assembly rejects.

To those who may be doubtful as to the cost, speed, or effectiveness of their buying, polishing or buffing operations, LEA technicians will be glad to give the benefit of their many years of experience along these lines.

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## NATIONAL STARTS WEST PALM BEACH SERVICE:

National Airlines' recent opening of service to West Palm Beach, Fla., as AM 31 brought D. B. Carr (left), chairman of the welcoming committee, to greet Capt. E. J. Kerahane, National's vice president in charge of operations, who piloted the first plane into Morrison Field. Left to right, besides Carr and Kerahane, are MacDonald Bryan, NAL publicity director; Margaret Watson, assistant chief stewardess; Capt. Denis Givens, division operations manager; and Fletcher C. Hooper, assistant station manager at the Palm Beaches.



Chicago and Southern's president Carleton Patton has announced that operation of the Memphis-Detroit segment granted him line in a recent Civil Aeronautics Board decision will require three DC-4's to begin day and night service. Only additional requesting society awarded will be a medium range wide range at Dulles, Ky.

Safety provisions in a working agreement between Mid-Continent Airlines and the Air Line Dispatchers Association have been approved by the National Railway Labor Board. The agreement also demands revision and renewal of the working agreement between United Airlines and the flight dispatchers at airports.

Pan American's Grace, a day-calling attention to completion of the second year of its all-cargo service, reports that volume of air shipments increased steadily in the two-year period. Cargo on the service increased from 1,300,000 pounds in 1962 to 2,200,000 in 1963, while air mail went up from 360,000 pounds to 280,000 pounds. Package plans to air first freight, high speed packages on its South American routes after the war.

Pennsylvania-Canadian Airlines announced that the 435th passenger it carried in July constituted the

### 3 DC-3's for WAL

Sharp increase in ending capacity of West Western Air Lines division will be effective this month when this company receives three additional DC-3's.

Tom Wolfe, Western's vice president of traffic, reports the equipment will permit more schedules and result in a 30 percent increase in seating capacity on the Los Angeles-Los Angeles-San Diego division, 75 percent on the Los Angeles-Salt Lake City division, 100 percent on the Los Angeles-San Francisco division, and 30 percent on the Salt Lake-Lakehead, Canadian division.

Western's Los Angeles-San Francisco service will be doubled Sept. 15, when six daily round trips will be flown.

largest number for any month in its history. The figure was 721 percent higher than July 1963, when the last time that over 700 passengers flew between 11 and 12 cities was in service during July this year.

Bruff Airways carried 23,794 revenue passengers during July, compared with 18,897 in June and 18,968 in July, last year. Bruff, which received the first of a series of returned planes July 4, boosted its July plane miles to 489,230, against 492,798 in June and 500,197 in July last year.

Addition of another DC-3 to Northwest Airlines' fleet will enable it to increase service between the Twin Cities and Chicago to 14 flights daily, effective Sept. 30, the line announced.

The Transportation and Postal Union branch of the Canadian Bureau of Statistics announced that Canada's Air Lines earned \$4,198 revenue passengers during April, compared with 22,558 in April last year and 29,813 in March. Revenue brought carried declined from \$15,776 pounds in 1963 to 10,678 pounds, and mail also declined from 613,941 to 561,389 pounds. Freight ton-miles and mail ton-miles, however, showed increases of 10 and 8 percent.

### New UAL Record

United Air Lines estimated that all-cargo flights will give it a 1944 mail record of approximately 30 billion pound-miles—nearly as much as the 31,277,669,000 pound-miles carried by all domestic airlines in 1941. John J. Hart, UAL's manager of postal service, cites conservative estimates that the Post Office will receive a \$6 to \$8 million dollar profit on air mail for the fiscal year just closed.

### CAB ACTION

■ Civil Aeronautics Board has begun action on a petition of National Airlines' application for additional points on the Jacksonville-Boston route for scheduled service to include New York. The CAB will hold a public hearing on the application on Sept. 17. At the CAB will hold a public hearing on the application on Sept. 17. At the CAB will hold a public hearing on the application on Sept. 17.

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### 17 Lines Take Issue With Bailey, Clark

Charge two Senators gave wrong impression as to air transport industry's support of "community" proposal in McCarran Bill.

The Airlines Committee for U. S. Air Policy, drawing the need for public hearings before Congress, took issue last week with some of the points made by Senators Bailey and Clark of the Senate Commerce Committee in their letter to the President.

The committee, which has been set up to coordinate the industry's response to the administration proposal for action on international routes until Congress has made further study of the situation.

The Airlines Committee, in a letter to Bailey and Clark, pointed out that all hearings held thus far in connection with the Senate Aviation Subcommittee's study of international air problems have been in executive session. Public hearings, the letter said, would be welcome, and the airlines are looking forward to them.

"Wrong Impression"—The committee, according to Bailey and Clark of giving a "wrong impression" as to air transport industry's support for the "community" proposal embodied in the McCarran Bill when the Senators wrote that "a number of important American companies" favored such a proposal. Only Pan American and United among the airlines believe in the community company idea, and 17 airlines oppose it.

The 17 airlines that Congress may change policy on international air transport "but not such as to require, we propose to proceed" under the Civil Aeronautics Act of 1938 and assert the competitive rights assured by Section 2 of that act. We trust that no erroneous impressions of any nature, or suggestions of any Congressional action, will impede the realization by the United States of the high place in international air transport to which it is entitled.

Written by Reye—"The Airlines" letter was written by Alexander B. Reye and was made public at a press conference where the appointment of Reye as chairman of the Airlines Committee, a post formerly held by Senator Bailey, Northwest Airlines, also was announced. Reye joined the com-

mittee seven weeks ago as special counsel, plus letter to the Senators described their mission to the President as "distracting" to the Committee. But he told the conference the airlines were not alarmed, that they feel there will be opportunity for hearing on overseas route applications by the Civil Aeronautics Board.

It is the Airlines Committee's attitude, Reye said, that while Congress is reviewing the law, which the 17 airlines believe should stand, nothing should be done to give the impression that change is necessary, before any change is made.

The President's letter, the committee said, was a statement of international development. Reye and he is satisfied that every government department faces regulated competition in U. S. international air transportation.

The State and Justice Departments have informed Senator Bailey's committee that they are opposed to the chosen instrument policy.

Reye's comment—Attorney General Biddle, in his comment on McCarran's bill, asserted that "While the legislation would not exclude other American air lines from engaging in foreign air transportation, nevertheless the 'All-American Flag Line, Inc.' would receive financial and other support from the government to an extent that is likely to exclude competition. These provisions of the bill are in direct violation of the principle of legislative policy in which the Department of Justice is directly interested because of its responsibility for the enforcement of the Sherman Act."

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## Reorganization Plan Of TWA in Effect

New transportation department, headed by John A. Collings, takes over all operating and service functions of airline.

Transcontinental & Western Air's reorganization plan went into effect last week as the new Transportation Department, headed by John A. Collings, took over all operating and service functions of the airline. TWA officials announced that the new department would work to improve the airline's position by appointment of regional general managers for New York, Kansas City, Chicago and Los Angeles, within the next few months.

**Personnel Expansion.**—The whole plan, according to President Jack Frye, looks toward a vast personnel expansion, possibly to 45,000 within a few years after the war. It is designed to expedite personnel of TWA personnel now in armed service, as well as the airline's expansion plans.

As transportation vice president Collings, formerly vice president of operations, will have charge of all regional and district office and activities as well as operations. Under him will be H. H. Gallup as operations manager, and W. F.

McGrath as the traffic manager. Among the functions the new department will handle are schedules, tariffs, public relations, passenger and cargo sales, flight and food services, reservations and ground service.

## 9th Regional Office Formed by CAA

Formation of a ninth regional office, covering the Hawaiian Islands and the Pacific Ocean area, with the exception of those areas included in the eighth (Alaska) region, is announced by the Civil Aeronautics Administration. The new region will extend CAA jurisdiction from the West Coast to Hawaii and beyond, in preparation for rapid expansion of commercial flying after the Pacific War.

**Headquarters Honolulu.**—Region at headquarters will be Honolulu, where the CAA revealed it has long operated an overseas airway traffic control center since late 1943. This center handles traffic control for aircraft operating between the West Coast and the South Pacific area and Hawaii.

It has been very successful in providing navigational assistance to planes which have become lost on long overwater hops.

The Administration also disclosed that additional overseas airway traffic control centers are now being established on other transoceanic air routes.

## Oral Argument Heard On N. Y. Extensions

Civil Aeronautics Board last week assembled the first quorum it has been able to muster in a month and heard arguments for Northwest Airlines' request in favor of CAB extension recommendations that Northwest be granted a New York extension to form a fourth transcontinental carrier.

The Board was strongly urged to overrule the restriction advocated by its examiners on the recommended route, which would prevent Northwest from operating its Pacific east of Minneapolis-St. Paul.

**PCA-TWA Arguments.**—Attorneys for PCA likewise endorsed the recommended extension of that carrier's system from Pittsburgh to New York. This was countered by objections from TWA, which pointed out that PCA competition



## HEADS NEW TWA POST:

Chosen to head the new Transportation Department set up by TWA's reorganization plan is John A. Collings, formerly vice-president of operations.

would likely divert nearly half of TWA's traffic over AM 4.

## Control Tower Cut Blow to Airlines

Closing of several airport traffic control towers, formerly operated by the Civil Aeronautics Administration with Army funds, is reported to have created a serious problem for airlines operating into the fields affected. The Army funds were withdrawn when the CAA was notified that the towers no longer were required for military purposes. No appropriation for CAA tower operation exists.

Opinion among the airlines seems to point to the desirability of continued federal operation of such facilities, and efforts to obtain legislation to finance control tower operation will probably be made. Airlines generally are unwilling to assume financial responsibility for such facilities, inasmuch as their use of them constitutes a small percentage of the total.

Airports at Philadelphia, Pa.; New Orleans, La.; Tampa, Fla. (unopened); Indianapolis, Ind.; Omaha, Neb.; Danvers, Calif.; Denver, Colo.; Fort Worth, Texas; Houston, Texas; Miami, Fla.; Portland, Ore.; St. Louis, Mo.; Seattle, Wash.; San Francisco, Calif.; San Diego, Calif.; Salt Lake City, Utah; San Antonio, Texas; San Jose, Calif.; San Juan, P.R.; Springfield, Ill.; St. Paul, Minn.; Tulsa, Okla.; Wichita, Kan.; and Youngstown, Ohio, are now without operating airport traffic control towers. At each of these, the tower was formerly operated by CAA with Army funds.

Fig. 4. Transport hearing date for segment of former route to the West Coast. (Inset: See p. 11.)

Fig. 5. Transport hearing date, General Public. (Inset: See p. 11.)

Fig. 6. Transport hearing date, American Airlines. (Inset: See p. 11.)

## ATA Seeks Data On New Transport

Airlines to seek agreement on requirements for advanced large-range ships.

As the first step in preparation of general specifications for an advanced type of non-stop transcontinental and overseas plane, all members of the Aircraft Requirements Committee of the Air Transport Association, representing major airlines, are being asked to submit preliminary data for consideration at the next committee meeting.

Their views are being requested on 44 questions, relating to a ship which would be kept beyond airlines now flying, dealing with the general purpose, passenger, baggage and crew provisions, performance, and crew facilities. This means a variety of queries under these headings, ranging from technical points on performance to such considerations as where the passenger shall put his hat, Pearson queries deal with passenger provisions, two-way radio facilities and other matters. The answers will be in for consideration before the next meeting, which probably will be held around the end of October.

Here are some of the matters on which the members will comment:

- General Purpose.**—Number of passengers, number of engines and horsepower, range, gross weight, and accommodations.
- Passenger Provisions.**—Desirability of adjustable seats of passenger and cargo space, seating capacity, doors and their location and size, whether a sleeper version should be considered, cost and hat storage, ceiling height, food service, lavatories, pressurization.
- Baggage.**—Suggested handling, storage location, weight, space.
- Cargo.**—Weight, density, distribution, cargo space, design loading of floor and supporting structure, parcel maximum, maximum length and cross section, possibility of hinged shelves for cargo stowage on two levels.
- Performance.**—Cruise speed, maximum standard gross at 80 percent, maximum gross at 100 percent, maximum power and 10,000 feet, 30,000

feet, maximum runway length at sea level, maximum range at 10,000 feet with 80 percent maximum power, 10 mph headwind and no fuel reserve, optimum installation of additional fuel tanks to give more range, maximum payload.

**Crew Facilities.**—Number of crew members and crew food and lavatory facilities.

## Priority for Cabinet

Under recent authorization of the Air Transport Command, the privilege of establishing general air travel priorities on domestic routes over which ATC has priority control has been extended to Cabinet members. Senators and representatives have had the privilege for some time.

Domestic air carriers will establish Class 3 priorities for members of Congress or the Cabinet on factory identification. A "Passenger's Residence of Air Priority" form certifying that the trip is necessary for the war effort and of sufficient urgency to require air transportation on the specific flight concerned must be signed.



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